

**ORDINANCE NO. 21-09**

**ADOPTING AN IMPACT FEE FACILITIES PLANS FOR A WATER SYSTEM;  
SANITARY SEWER COLLECTION SYSTEM; STORM DRAIN SYSTEM; AND  
TRANSPORTATION**

**WHEREAS**, Tremonton City has established and is currently collecting impact fees for a Water System; Sanitary Sewer Collection System; and Storm Drain System; and

**WHEREAS**, Tremonton City is desirous of establishing impact fees for Transportation; and

**WHEREAS**, UCA 11-36a-301 requires that before amending or enacting new impact fees that a City shall prepare an Impact Fee Facilities Plan; and

**WHEREAS**, UCA 11-36a-501 also requires that a City caused to be posted on the Utah Public Notice Website a notice of intent to prepare an Impact Fee Facilities Plan (see Appendix A); and

**WHEREAS**, UCA 11-36a-502 also requires that public notice be provided to adopt or amend an Impact Fee Facilities Plan (see Appendix A); and

**NOW, THEREFORE, BE IT ORDAINED** that the Tremonton City Council hereby adopts the Impact Fee Facilities Plans as attached in Appendix B through E for the following:

- Water System (see Appendix B)
- Sanitary Sewer Collection System (see Appendix C)
- Storm Drain System (see Appendix D)
- Transportation (see Appendix E)

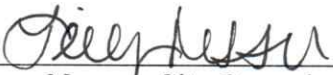
ADOPTED AND PASSED by the Tremonton City Council this 21<sup>st</sup> day of September 2021.

Should any portion of this Ordinance be deemed invalid or unenforceable by the rule of law or otherwise, all other aspects of this Ordinance shall remain enforceable and in full effect. This Ordinance shall not take effect until ninety (90) days after the date of approval.

**TREMONTON CITY CORPORATION**

By   
Roger Fridal, Mayor

ATTEST:

By   
Linsey Nessen, City Recorder



**Appendix A- Notice of intent to prepare an Impact Fee Facilities Plan and Impact Fee Analysis & Notice to Adopt Impact Fee Facilities Plan**

**PUBLIC NOTICE**

**Public Body:** Tremonton City Council

**Subject:** Impact Fee Facilities Plan and Impact Fee Analysis

**Notice Title:** Notice of Intent

**Notice Type:** Notice of Intent to Prepare Impact Fee Facilities Plan and Impact Analysis

**Notice Date:** December 12, 2019

**Description/Agenda:**

Tremonton City Corporation, Utah in accordance with the requirements of Utah Code Annotated 11-36a-501 and 11-36a-503, posts a notice of its intent to prepare or amend an Impact Fee Facilities Plan and Impact Fee Analysis for culinary water impact fee, secondary water impact fee, sanitary sewer collection impact fee, storm drain impact fee, parks, trails, recreation and open space impact fee, transportation impact fee, and public safety impact fee for fire/EMS and law enforcement. The location(s) that will be included in the Impact Fee Facilities Plan and Impact Fee Analysis is/are all area within the legal Tremonton City limits and the declared annexation areas of Tremonton City.

**Notice of Special Accommodations:** If you need special accommodations to participate in a City Council Meeting, please call the City Recorder, Linsey Nessen, at 435-257-9506. Please provide at least 24 hours notice for adequate arrangements to be made.

Notice of Electronic or telephone participation: Tremonton City passed Ordinance No. 13-04 approving Electron Meeting Procedures in accordance with Section 52-4-207 of Utah Code Annotated.

**From:** [support@utah.gov](mailto:support@utah.gov)  
**To:** [Cynthia Nelson](#); [Linsey Nessen](#); [Shawn Wamke](#)  
**Subject:** Public Notice for City Council/RDA  
**Date:** Thursday, December 12, 2019 5:25:17 PM

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# Utah Public Notice

## City Council/RDA

### Public Notice - Impact Fee Facilities Plan & Analysis

**Notice Date & Time:** 12/12/19 1:00 AM

**Description/Agenda:**

PUBLIC NOTICE

Public Body: Tremonton City Council

Subject: Impact Fee Facilities Plan and Impact Fee Analysis

Notice Title: Notice of Intent

Notice Type: Notice of Intent to Prepare Impact Fee Facilities Plan and Impact Analysis

Notice Date: December 12, 2019

**Description/Agenda:**

Tremonton City Corporation, Utah in accordance with the requirements of Utah Code Annotated 11-36a-501 and 11-36a-503, posts a notice of its intent to prepare or amend an Impact Fee Facilities Plan and Impact Fee Analysis for culinary water impact fee, secondary water impact fee, sanitary sewer collection impact fee, storm drain impact fee, parks, trails, recreation and open space impact fee, transportation impact fee, and public safety impact fee for fire/EMS and law enforcement. The location(s) that will be included in the Impact Fee Facilities Plan and Impact Fee Analysis is/are all area within the legal Tremonton City limits and the declared annexation areas of Tremonton City.

**Notice of Special Accommodations:** If you need special accommodations to participate in a City Council Meeting, please call the City Recorder, Linsey Nessen, at 435-257-9506. Please provide at least 24 hours notice for adequate arrangements to be made.

**Notice of Electronic or telephone participation:** Tremonton City passed Ordinance No. 13-04 approving Electron Meeting Procedures in accordance with Section 52-4-207 of Utah Code Annotated.

**Notice of Special Accommodations:**

Persons with disabilities needing special assistance to participate in this meeting should

contact Linsey Nessen no later than 48 hours prior to the meeting.

**Notice of Electronic or telephone participation:**

Anchor location for Electronic Meeting by Telephone Device. With the adoption of Ordinance No. 13-04, the Board may participate per Electronic Meeting Rules. Those eligible to request participation by electronic means should contact Linsey Nessen, City Recorder no later than 48 hours prior to the meeting to make arrangements.

**Other information:**

**Location:**

102 S Tremont St, Tremonton, 84337

**Contact information:**

Linsey Nessen, City Recorder , [lnessen@tremontoncity.com](mailto:lnessen@tremontoncity.com), (435)257-9506



## PUBLIC NOTICE

**Public Body:** Tremonton City Council

**Subject:** Impact Fee Facility Plan

**Notice Title:** Notice to Adopt Impact Fee Facilities Plan

**Notice Type:** Notice to Adopt Impact Fee Facilities Plan

**Notice Date:** September 9, 2021

**Description/Agenda:**

Tremonton City Corporation, Utah, in accordance with the requirements of Utah Code Annotated 11-36a-502 and 10-9a-205, gives public notice to adopt Impact Fee Facilities Plans for water system impact fee, sanitary sewer collection impact fee, storm drain impact fee, and transportation system impact fee. Impact fees are one-time fees imposed upon new development, typically as a condition of the City issuing a building permit to mitigate the impact of the new development on public infrastructure. The imposition and collection of the impact fees are necessary for the City to continue to provide infrastructure occasioned by the demands and needs of the new development at existing service levels. The impact fees are reasonably related to the costs of providing said public infrastructure necessitated by new development within the City and are consistent with the Utah Impact Fees Act requirements. The location(s) that will be included in the Impact Fee Facilities Plan is the entire area of the incorporated limits of Tremonton City and any area outside of the Tremonton City, which may hereafter be annexed into Tremonton City or serviced by any Tremonton City Public Facility.

The City Council shall hold a public hearing on September 21, 2021, at 7:00 pm or soon thereafter in the Tremonton City Council Chambers, located at 102 S. Tremont Street, Tremonton, Utah 84337, to receive public comment on the adoption of the aforementioned Impact Fee Facility Plans. Draft copies of the: 1) the ordinance adopting the Impact Fee Facilities Plans; 2) the Impact Fee Facility Plans for a water system impact fee, sanitary sewer collection impact fee, storm drain impact fee, and transportation system impact fee; 3) summaries of each of the aforementioned plans designed to be understood by a layperson will be available on or before September 9, 2021, at [www.tremontonciv.com](http://www.tremontonciv.com), at the Tremonton City Library located at 210 N. Tremont Street, Tremonton, Utah, and the Satellite Library Branch located in the Bear River Valley Senior Center located at 510 West 1000 North, Tremonton, Utah during regular business hours. Additionally, on or before September 9, 2021, copies of the aforementioned documents are available to the public at the Tremonton City Recorder's Office located at 102 S. Tremont Street, Tremonton, Utah, during regular business hours. The public may file written objections associated with the adoption of an Impact Fee Facility Plan, and each written objection filed will be provided to the City Council for their consideration.

Written objections, questions pertaining to this notice, or contents of the Impact Fee Facilities Plan

may be directed to Shawn Warnke, Tremonton City Manager (435) 257-9504, [swarnke@tremontoncity.com](mailto:swarnke@tremontoncity.com) , or mailed to Shawn Warnke, 102 S. Tremont St. Tremonton, UT 84337.

**Notice of Special Accommodations:** If you need special accommodations to participate in a City Council Meeting, please call the City Recorder, Linsey Nessen, at 435-257-9506. Please provide at least 24 hours notice for adequate arrangements to be made.

Notice of Electronic or telephone participation: Tremonton City passed Ordinance No. 13-04 approving Electronic Meeting Procedures in accordance with Section 52-4-207 of Utah Code Annotated.

## Appendix B- Impact Fee Facilities Plan for the Water System

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# WATER SYSTEM IMPACT FEE FACILITIES PLAN UPDATE

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*for*

*TREMONTON CITY CORPORATION*

## August 2021

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*Prepared By:*

*Jones and Associates Consulting Engineers*

*6080 Fashion Point Drive*

*South Ogden, Utah 84403*

*801-476-9767*

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## 6.0 IMPACT FEE FACILITIES PLAN

### 6.1 Introduction

*This report has been prepared as an update for Section 6.0 of the November 2013 “Culinary Water System Capital Facilities Plan & Impact Fee Facilities Plan”. It is meant as a full replacement for that section. Any references to Sections in this updated document are references to the 2013 report unless it has been updated here. This report also creates an IFFP section for the July 2017 “Secondary Water Capital Facilities Plan”.*

*The two systems operate together to provide indoor and outdoor water uses to the city. Before the expansion of the Secondary Water System, the outdoor use was primarily provided through the Culinary Water System alone. The secondary water systems were expanded for the sole purpose of freeing capacity in the culinary water system for growth. For every existing home connected to the secondary water system, 2/3 homes can be added to the culinary system.*

*Prior to the expansion of the secondary system, the City had developed a secondary water system that was limited to about 50 connections, a city park, and a public school. Since this document contains projects and information to provide indoor and outdoor water to the city, it is simply called the “Water System Impact Fee Facilities Plan”.*

In 2016 it was decided that the expansion of the secondary water system would be the approach the City would take to solve the increasing demands on its culinary water system. A system was planned and is outlined in the July 2017 “Secondary Water Capital Facilities Plan”. It is anticipated that the new secondary water system will reduce demand on the culinary water system by 2/3 during the peak use time in the summer. At this time, the “Culinary Water Capital Facilities Plan” will not be updated to reflect the change until more of the City is transitioned over to the emerging secondary water system as the current demands on the culinary water system remain mostly unchanged.

The Water System Impact Fee will be enacted as a means for new development to pay for their impact on the Culinary Water System and Secondary Water System. Utah state law requires that an Impact Fee Facilities Plan (IFFP) be prepared before an Impact Fee can be implemented. The law requires that the IFFP only contain the costs for short term (6-10 year) growth, and it must also not raise the existing level of service. This section will summarize information from Sections 1-5 of this report (Capital Facilities Plan) as it pertains to the enactment of the impact fee. The IFFP is a subset of the data contained in the Capital Facilities Plans for the Culinary Water System and the Secondary Water System and that information will be summarized in this section.

Title 11-36a, Section 300, of the Utah State Code outlines the requirements of the Impact Fee Analysis which is also required to be prepared before an Impact Fee can be implemented. The Impact Fee Analysis (IFA) will be performed by Zions Bank Public Finance and will be contained in a separate document.



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## 6.2 Growth Projections

Section 2.3 of the Culinary Water Capital Facilities Plan discusses the long-term growth projections for Tremonton City. This section will focus on the population growth during the next decade.

### 2013 to 2020

The growth rate in the 2000's far exceeded the historical growth rate as outlined in Section 2.3. As a result the census population in 2010 was much higher than the historical curve predicted. Over the past few years, with the nationwide housing market crash, the City has seen a much slower rate than the previous decade. It is expected that the population growth will correct itself and continue to follow the historical curve of the growth trendline.

For the 2013 to 2020 period the Capital Facilities Plan uses the actual census count from 2010 and an exponential growth rate to meet the population estimate from Section 2.3 in 2020. The ERU growth is then projected at the same growth rate.

### 2021 to 2032

There has been a recent significant increase in development projects, however, at this point there is not enough data to suggest that the 10-year growth projections won't continue to follow the historical curve. This recent trend should be further analyzed with the next IFFP update to determine if a correction should be applied to the growth curve. With that in mind, for the 2021-2032 period, the projected growth rate will follow the equation given in Section 2.3, which is the historical growth rate estimated by the growth equation given in that same section, which is summarized in Table 6.2.1.

**Table 6.2.1 – Population and ERU Projections (IFFP)**

	Population	Water ERU's
2010 (census)	7,647	2731
2011	7,785	2780
2012	7,925	2830
2013	8,068	2881
2014	8,213	2933
2015	8,361	2986
2016	8,512	3040
2017	8,665	3095
2018	8,821	3150
2019	8,980	3207
2020	9,142	3265
2021	9,361	3343

	Population	Water ERU's
2022	9,584	3423
2023	9,813	3505
2024	10,048	3589
2025	10,287	3674
2026	10,533	3762
2027	10,784	3851
2028	11,041	3943
2029	11,304	4037
2030	11,573	4133
2031	11,848	4231
2032	12,130	4332

### 6.3 Level of Service

Utah State Code requires that the culinary water system be able to provide the following pressures in the distribution system:

1. 20 psi during conditions of fire flow and fire demand experienced during peak day demand.
2. 30 psi during peak instantaneous demand; and
3. 40 psi during peak day demand.

That Culinary Water System currently meets all levels of service as outlined above. The Secondary Water System is designed to be able to provide similar levels of service. Both systems typically provide a minimum pressure of 50 to 60 psi under normal operating conditions. This is the level of service that the City has established for the water systems. Both systems have no deficiencies regarding this level of service. Any part of the existing water systems that is not able to handle water delivery under these parameters does not meet the City's established level of service, and it is considered deficient. The City's proposed level of service during this IFFP period will equal the existing level of service in the system.

### 6.4 Future Development Needs

With so much ground that remains undeveloped, it is nearly impossible to predict where growth will happen over the next 10 years. The most active areas over the past few years shown on the Project Location Map (Figure 6.4.1). Projects will be chosen, however, to serve the need where the development arises.



Table 6.4.1 below shows the projects most likely to be constructed in the next 10 years. The column labeled "Impact Fee Eligible Costs" are the portions of the projects that should be paid for thorough Impact Fees (i.e. System Improvements as defined in UCA 11-36a-102).

**Table 6.4.1 – Most Likely Capital Improvement Projects**

	<b>Project Description</b>	<b>Additional ERU's Served</b>	<b>Impact Fee Eligible Cost</b>
<b><i>Culinary Water Projects</i></b>			
19	Develop or acquire a new water source at locations that will be determined at the time of construction. It is anticipated that this will involve the drilling of new wells or purchasing and adapting an existing well. (1 source)	714	\$1,574,400
<b><i>Secondary Water Projects</i></b>			
1	Service Area 5 - Construct pump station, pipe network, and service connections. 483 new connections (2021)	322	\$3,538,189
2	Service Area 4 - Construct pump station and pipe to service immediate area around the pump station. 383 new units. (2021)	255	\$449,448
3	Service Area 2 - Expand to Tremont Center / Matheson Apartment complex, JD Harris Subdivision, and other miscellaneous connections in the area (2021) - Matheson Apts (304 units; 204 ERU) - JD Harris Subd (56 ERU) - Other Misc (150 units; 100 ERU)	241	\$491,669
4	Service Area 9 - Construct Pump Station and upsize developer installed pipe. 650 new connections (2022)	436	\$399,720
5	Construct equalization basin (2023)	included in other projects	\$272,550
6	Service Area 9 – extend piping and services into Holmgren East Subdivision. 110 new connections. (2023)	74	\$457,800
7	Service Area 4 - Extend piping into neighborhoods north of pump station. 290 new connections. (2026)	194	\$2,238,420
8	Service Area 2 - Install additional pumps in pump station. Upsize and relocate filter station 516 new connections. (2027)	346	\$665,040
<b>Totals</b>			<b>\$10,087,236</b>

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*Note:*

*\*for secondary water projects, the additional ERU's served is 2/3 the number of connections served as each secondary water connection saves 2/3 of the average ERU's peak day demand on the water system. Servicing existing development with secondary water that was previously using culinary water for outdoor uses is Impact Fee eligible because the water saved can be used for new development in other areas of the City.*

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**Figure 6.4.1 – IFFP Project Location Map**

## 6.5 Existing Facilities with Excess Capacity

Following is a list of existing water system facilities with excess capacity for new growth. The original construction costs have been documented, and the Impact Fee may include a buy-in component for the excess capacity that was paid for previously by the City as further explained in the Impact Fee Analysis

**Table 6.5.1 – Existing Facilities with Remaining Capacity**

<b>Date Const.</b>	<b>Project Location/Description</b>	<b>Project Cost</b>	<b>Total Capacity (ERU's)</b>	<b>Existing ERU's</b>	<b>Excess Capacity (ERU's)</b>
1985	1000 North – 12" main. 300 East to pump house	\$47,830	1676	1094	<b>582</b>
1991	Iowa String (Main Street to 1000 N) – 10" line	\$57,850	1167	157	<b>1010</b>
1992	Northwest Annexation Water Project (1000 N; I-84 to 2300 West) – 8" line	\$125,910	748	314	<b>434</b>
1997	Iowa String – 1200 S to Main St – 10" line	\$150,000	1167	119	<b>1048</b>
2003	Secondary Water – Service Area 1 Phase 1 (Spring Acres	\$172,220	1364	0	<b>1364</b>
2006	Bear River Waterline Crossing – 16"	\$121,969	2981	1059	<b>1922</b>
2011	Cedar Ridge Well and Pipeline Project	\$893,429	476	476	<b>0</b>
2012	2 Million Gallon Culinary Water Tank Project	\$1,101,530	3509	1004	<b>2505</b>
2014	Construct 10" line in upper pressure zone to Country View Estates. The level of service in the area was deficient, however, a portion may be recovered in the impact fee for oversizing this line to 10" from 8"	\$94,403	1220	780	<b>440</b>
2014	Replace existing 10" culinary water line with 18" culinary water line in 1000 N from 2300 W to I-15	\$161,450	3771	1220	<b>2551</b>
2019	I-84 Utility Line Extension at 2300 West – 18" line	\$112,220	3771	183	<b>3588</b>
2018	Secondary Water – Service Area 1 and 2 expansion	\$1,283,449	2474	0	<b>2474</b>
2019	Secondary Water – Service Area 3 (749 new connections)	\$3,001,986	501	0	<b>501</b>
varies	Secondary Water Shares – 508 total - SA1 – 42 shares - SA2 – 72 shares - SA3 – 115 shares - SA5 – 149 shares - SA4 – 53 shares - SA2 expansion – 23 shares - SA9 Ph2 – 17 shares - SA4 Ph2 – 37 existing shares used, 91 still needed	\$1,190,463	1651	0	<b>1651</b>
<b>Total</b>		<b>\$8,514,709</b>			

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Notes:

1. **Culinary Water Line Capacity:** Culinary water line excess capacity was calculated using a standard maximum velocity of 5 ft/sec. The difference in flow capacity from that calculated in the water model vs the maximum of 4 ft/sec considered as extra capacity. A flow rate of 1.05 gpm per ERU was used in the calculation as outlined in the 2013 Culinary Water Capital Facilities Plan.
2. **Reservoir Capacity:** ERU's at the end of 2020 was 4971. The new state standard requirement for equalization storage is 570 gal/ERU for a total equalization storage of 2,833,470. This includes indoor and outdoor use. An additional 840,000 gallons is reserved for fire flow. A total of 3,673,470 gallons of storage is required. The City currently has 5,101,334 gallons of storage for an excess of 1,427,864 gallons of storage.
3. **Secondary Water Systems:** The secondary water systems were added for the sole purpose of freeing capacity in the culinary water system for growth. For every existing home connected to the secondary water system, 2/3 homes can be added to the culinary system.

## 6.6 Funding Source Options

### Grants

The city is unaware of any potential grant sources for the water systems. However, should it be the recipient of any such grants, it will then look at the potential to reduce impact fees.

### Bonds

The city has bonded to fund portions of the new secondary water system. It is not anticipated that the city will obtain additional bonds in the future for other future phases of the system. These bonds will be considered in the IFA.

There are no existing bonds on the culinary water system and it is not anticipated that any bonds will be obtained for future improvements on the culinary water system. No costs associated with bond issuance have been included in the calculation of impact fees for that part of the water system.

### Transfer from General Fund

To the extent that the City can generate net revenues in its General Fund, it may choose to transfer all or a portion of the net revenues to the City's capital fund for the water systems. It is most likely that, if net revenues should be generated, they will be used to replace aging facilities or increase level of service.

### Impact Fees

Because of the growth anticipated to occur in the city, impact fees are a viable means of allowing new development to pay for its impacts on the existing system. The city finds that it is necessary to impose impact fees to maintain the proposed level of service for the water systems. The city plan for financing these system improvements relies upon impact fees. This IFFP is developed in accordance with legal guidelines so that an Impact Fee Analysis for the water systems may be prepared, and that the City may charge impact fees said system.

### Anticipated or Accepted Dedications of System Improvements

Any item that a developer funds must be included in the IFFP if a credit against impact fees is to be issued and must be agreed upon with the City before construction of the improvements.



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## 6.7 Certification

"I certify that the attached impact fee facilities plan:

1. includes only the costs of public facilities that are:
  - a. allowed under the Impact Fees Act; and
  - b. actually incurred; or
  - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
  - a. costs of operation and maintenance of public facilities;
  - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
  - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act."

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Chris L. Breinholt, P.E. – City Engineer

**Appendix A – Project Cost Estimates**

## Appendix C- Impact Fee Facilities Plan for the Sanitary Sewer Collection System



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# SANITARY SEWER COLLECTION SYSTEM IMPACT FEE FACILITIES PLAN

## UPDATE

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*for*

*TREMONTON CITY CORPORATION*

## August 2021

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*Prepared By:*

*Jones and Associates Consulting Engineers*

*6080 Fashion Pointe Drive*

*South Ogden, Utah 84403*

*801-476-9767*

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## 4.0 IMPACT FEE FACILITIES PLAN

### 4.1 Introduction

*This report has been prepared as an update for Section 4.0 of the November 2013 “Sanitary Sewer Collection System Capital Facilities Plan & Impact Fee Facilities Plan”. It is meant as a full replacement for that section. Any references to Sections in this updated document are references to the 2013 report unless it has been updated here.*

The Sanitary Sewer Collection System Impact Fee will be enacted as a means for new development to pay for their impact on the existing and future Sanitary Sewer Collection System. Utah state law requires that an Impact Fee Facilities Plan (IFFP) be prepared before an Impact Fee can be implemented. The law requires that the IFFP only contains the costs for short term (6-10 year) growth, and it must also not raise the existing level of service. This section will summarize information from Sections 1-3 of the above-mentioned Capital Facilities Plan as it pertains to the enactment of the impact fee. The IFFP is a subset of the data contained in the Capital Facilities Plan and that information will be summarized in this section.

Title 11-36a, Section 300, of the Utah State Code outlines the requirements of the Impact Fee Analysis which is also required to be prepared before an Impact Fee can be implemented. The Impact Fee Analysis (IFA) will be performed by Zions Bank Public Finance and will be contained in a separate document.

### 4.2 Growth Projections

Section 2.3 of the Capital Facilities Plan discusses the long term growth projections for Tremonton City. This section will focus on the growth during the next decade which is the duration of the IFFP, which is the duration of the IFFP.

#### **2013 to 2020**

The growth rate in the 2000’s far exceeded the historical growth rate as outlined in Section 2.3. As a result the census population in 2010 was much higher than the historical curve predicted. Over the past few years, with the nationwide housing market crash, the City has seen a much slower rate than the previous decade. It is expected that the population growth will correct itself and continue to follow the historical curve of the growth trendline.

For the 2013 to 2020 period the plan uses the actual census count from 2010 and an exponential growth rate to meet the population estimate from Section 2.3 in 2020. The ERU growth is then projected at the same growth rate.

#### **2021 to 2032**

There has been a recent significant increase in development projects, however, at this point there is not enough data to suggest that the 10-year growth projections won’t continue to follow the historical curve. This recent trend should be further analyzed with the next IFFP update to determine if a correction should be applied to the growth curve. With that in mind, for the 2021-2032 period, the projected growth rate will follow the equation given in Section 2.3, which is the historical growth rate estimated by the growth equation given in that same section, which is summarized in Table 4.2.1.

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**Table 4.2.1 – Population and ERU Projections (IFFP)**

	Population	Sewer ERU's
2010 (census)	7,647	2,752
2011	7,785	2,970
2012	7,925	3,023
2013	8,068	3,078
2014	8,213	3,133
2015	8,361	3,189
2016	8,512	3,247
2017	8,665	3,305
2018	8,821	3,365
2019	8,980	3,426
2020	9,142	3,489
2021	9,361	3,573
2022	9,584	3,658
2023	9,813	3,746
2024	10,048	3,835
2025	10,287	3,926
2026	10,533	4,020
2027	10,784	4,116
2028	11,041	4,214
2029	11,304	4,314
2030	11,573	4,417
2031	11,848	4,522
2032	12,130	4,630

### 4.3 Level of Service

As with any sanitary sewer collection system, the reasonable expectation of the residents is that they can use the sewer system under normal operating conditions, including peak use times, without the connection backing up. Unique situations such as blockages, unforeseen infiltration from surface flooding, line breaks, and other unexpected problems are not considered in this analysis.



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The existing collection system was analyzed using the parameters outlined in Section 3.2. The level of service that was decided as a minimum level is that all pipes will serve the city during peak hours with no more than 75% depth of flow in the pipe. Any pipe flowing over 75% during those times is considered to be deficient and does not meet the City's established level of service. The City's proposed level of service during this IFFP period will equal the existing level of service in the system.

Table 3.5.1 summarizes all the capital facilities project's estimated costs. If a project, or portion of a project, corrects an existing deficiency; the costs associated with that correction are shown in the column labeled "Current Deficiency or Upgrade". Any other costs that are not associated with growth, such as system upgrades, are also shown in that column. These costs shall not be considered in the calculation of the Impact Fee.

#### **4.4 Future Development Needs**

With so much ground that remains undeveloped, it is nearly impossible to predict where growth will happen over the next 10 years. The most active development areas at this time are shown on the Project Location Map (Figure 4.4.1) along with the locations of the proposed Impact Fee Projects. Projects will be chosen, however, to serve the need where the development arises.

Table 4.4.1 below shows the projects most likely to be constructed in the next 10 years. The column labeled "Developer Participation" shows costs that should be borne by each individual developer at the time of construction as project improvements. The column labeled "Impact Fee Improvements" are the portions of the projects that should be paid for as system improvements through Impact Fees.

**Table 4.4.1 – Most Likely Capital Improvement Projects**

<b>Project</b>	<b>Project Description</b>	<b>Additional ERU's Served</b>	<b>Current Deficiency</b>	<b>Developer Participation</b>	<b>Impact Fee Improvements</b>	<b>Total</b>
3	Upsize existing line along east Main Street. Location: Main St. from Malad River to approx. 1150 East (construct in 2022)	794	\$0	\$0	\$970,620.75	<b>\$970,620.75</b>
7	Upsize trunk line along I-84 from the Harmony Heights development to the intersection of Main Street and 2300 West. This project will be developer constructed.	1002	\$0	\$541,710	\$486,694	<b>\$1,028,404</b>
8	Construct sewer lift station (undeveloped areas south of I-15 or north of 600 N)	400	\$0	\$0	\$260,000	<b>\$260,000</b>
9	Upsize developer installed 8" line to 10" located in the area between 600 North and 1000 North in the area of the future 950 East (River's Edge Subdivision)	418	\$0	\$0	\$16,900	<b>\$16,900</b>
<b>Totals</b>			<b>\$0</b>	<b>\$541,710</b>	<b>\$1,734,214.75</b>	<b>\$2,275,924.75</b>

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**Figure 4.4.1 – IFFP Project Location Map**

## 4.5 Existing Facilities with Excess Capacity

Following is a list of existing sanitary sewer facilities with excess capacity for new growth. The original construction costs have been documented and the Impact Fee includes a buy-in component for the excess capacity that was paid for previously.

**Table 4.5.1 – Existing Facilities with Remaining Capacity**

<b>Date Const.</b>	<b>Project Location/Description</b>	<b>Project Cost</b>	<b>Total Capacity (ERU's)</b>	<b>Existing ERU's</b>	<b>Excess Capacity (ERU's)</b>
1987	Southwest sewer trunk line	\$84,920	1,604	467	<b>1,137</b>
1991	Iowa String (Main Street to 1000 North)	\$115,121	1,466	346	<b>1,120</b>
2006	2000 West sewer line	\$322,924	2,051	50	<b>2,001</b>
2007	1200 South sewer line upsizing	\$900,000	7,946	1716	<b>6,230</b>

## 4.6 Funding Source Options

### Grants

The city is unaware of any potential grant sources for the sanitary sewer collection system. However, should it be the recipient of any such grants, it will then look at the potential to reduce impact fees.

### Bonds

The city has no outstanding bonds for the sanitary sewer collection system. While the City could issue bonds in the future to fund sewer collection facilities, no bonds are currently being contemplated and therefore no costs associated with bond issuance have been included in the calculation of impact fees.

### Transfer from General Fund

To the extent that the City can generate net revenues in its General Fund, it may choose to transfer all or a portion of the net revenues to the City's capital fund for the sanitary sewer collection system. It is most likely that, if net revenues should be generated, they will be used to replace aging facilities.

### Impact Fees

Because of the growth anticipated to occur in the city, impact fees are a viable means of allowing new development to pay for its impacts on the existing system. The city finds that it is necessary to impose impact fees to maintain the proposed level of service for the sanitary sewer collection system. The city plan for financing these system improvements relies upon impact fees. This IFFP is developed in accordance with legal guidelines so that an Impact Fee Analysis for the sanitary sewer collection system may be prepared, and that the City may charge impact fees for sanitary sewer collection system.



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### **Anticipated or Accepted Dedications of System Improvements**

Any item that a developer funds must be included in the IFFP if a credit against impact fees is to be issued and must be agreed upon with the City before construction of the improvements.

### **4.7 Certification**

"I certify that the attached impact fee facilities plan:

1. includes only the costs of public facilities that are:
  - a. allowed under the Impact Fees Act; and
  - b. actually incurred; or
  - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
  - a. costs of operation and maintenance of public facilities;
  - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
  - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act."

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Chris L. Breinholt, P.E. – City Engineer

**Appendix A – IFFP Project Cost Estimates**

## Tremonton City Sanitary Sewer Capital Facilities Plan

### Capital Improvement Projects

# Project #3

Description: Upsize existing line along east Main Street. The new line will serve development mostly north of Main Street and west of the Malad River.

Location: Main Street from Malad River to approximately 1150 East

Item	Description	Units	Unit Price	Total Amount
1	Mobilization	1 LS	\$20,000.00	\$20,000.00
2	Traffic Control	1 LS	\$14,000.00	\$14,000.00
3	Video Locate Sewer Laterals on Existing Line	1 LS	\$2,200.00	\$2,200.00
4	Saw Cut Asphalt	6,400 LF	\$2.00	\$12,800.00
5	Remove asphalt	19,200 SF	\$3.50	\$67,200.00
6	Remove sidewalk	350 SF	\$1.75	\$612.50
7	Remove curb & gutter	50 EA	\$4.00	\$200.00
8	Tree Removal	4 EA	\$650.00	\$2,600.00
9	Remove Existing Sewer Manhole	4 EA	\$3,200.00	\$12,800.00
10	Abandon Existing Sewer Manhole	7 EA	\$1,300.00	\$9,100.00
11	Plug and abandon existing 8" sewer pipe	4 EA	\$550.00	\$2,200.00
12	Bypass sewerline pumping	3 WK	\$7,500.00	\$22,500.00
13	Remove existing Sewer Pipe	70 LF	\$25.00	\$1,750.00
14	New 12" SDR-35 Sewer Pipe	1,500 LF	\$85.00	\$127,500.00
15	Guided Bore w/ Pilot Tube - 120' of 12" Sewer Pipe	1 LS	\$86,000.00	\$86,000.00
16	New Sewer Manhole	12 EA	\$5,800.00	\$69,600.00
17	Construct utility bridge (As Per Detail DT-XX)	1 LS	\$18,500.00	\$18,500.00
18	Concrete Casement Cap on Utility Bridge Casing	2 EA	\$780.00	\$1,560.00
19	Reinforce Utility Bridge Abutments	1 LS	\$8,500.00	\$8,500.00
20	Connect to existing sewer lateral	28 EA	\$1,600.00	\$44,800.00
21	Import Granular Borrow	700 Ton	\$15.00	\$10,500.00
22	Roadbase	9,100 Ton	\$25.00	\$227,500.00
23	UDOT Asphalt mix	1,000 Ton	\$105.00	\$105,000.00

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24	Flowable Fill in UDOT ROW (If needed)	80	Ton	\$92.00	\$7,360.00
25	Landscape Restoration	500	SF	\$5.00	\$2,500.00
26	New Manhole Collars	12	EA	\$425.00	\$5,100.00
					<hr/>
				Subtotal	\$888,382.50
				10% Engineering and Contingency	\$88,238.25
				<b>TOTAL</b>	<b>\$970,620.75</b>

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*Tremonton City Sanitary Sewer Capital Facilities Plan*

*Capital Improvement Projects*

# Project #7

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Description: Construct trunk line along I-84 from the Harmony Heights development to the intersection of Main Street and 2300 West. This project will be developer constructed. This project is shown in this report because the city will participate in an upsizing cost

Location: Along I-84 from 1000 North near Exit 39 to the intersection of Main Street and 2300 West

### Overall Cost

Item	Description	Units	Unit Price	Total Amount
1	Construct 12" sewer line	1,400 lf	\$48	\$67,200
2	Construct 10" sewer line	6,380 lf	\$40	\$255,200
3	Furnish and install sewer manhole	23 ea	\$4,100	\$94,300
Subtotal				\$416,700
30% Engineering and Contingency				\$125,010
<b>TOTAL</b>				<b>\$541,710</b>

### Developer Cost

Item	Description	Units	Unit Price	Total Amount
1	Construct 8" sewer line	7,780 lf	\$36	\$280,080
3	Furnish and install sewer manhole	23 ea	\$4,100	\$94,300
Subtotal				\$374,380
30% Engineering and Contingency				\$112,314
<b>TOTAL</b>				<b>\$486,694</b>

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*Tremonton City Sanitary Sewer Capital Facilities Plan*

*Capital Improvement Projects*

## Project #8

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Description: Upsize sewer lift station. This is for a sewer lift station at an undermined location south of I-15. There have been a number of projects interested in the general area. Any area south of the I-15 will require a sewer lift station for sewer service. The pumps in the lift station can be upgraded as more development demands it.

Location: Undeveloped area south of I-15 or flat ground areas north of 600 North near the railroad tracks

<b>Item</b>	<b>Description</b>	<b>Units</b>	<b>Unit Price</b>	<b>Total Amount</b>
1	Construct future sewer lift station	1 LS	\$200,000	\$200,000
			Subtotal	\$200,000
			30% Engineering and Contingency	\$60,000
			<b>TOTAL</b>	<b>\$260,000</b>



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*Tremonton City Sanitary Sewer Capital Facilities Plan*

*Capital Improvement Projects*

## Project #9

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Description: Upsize developer installed 8" sewer line to 10" sewer line for extra capacity to serve the area to the east.

Location: area between 600 North and 1000 North in the area of the future 950 East (River's Edge Subdivision)

<b>Item</b>	<b>Description</b>	<b>Units</b>	<b>Unit Price</b>	<b>Total Amount</b>
1	Upsize developer installed 8" line to 10" line	2,600 lf	\$5	\$13,000
			Subtotal	\$13,000
			30% Engineering and Contingency	\$3,900
			<b>TOTAL</b>	<b>\$16,900</b>

## Appendix D- Impact Fee Facilities Plan for Storm Drain System



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# STORM DRAIN SYSTEM IMPACT FEE FACILITIES PLAN

## UPDATE

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*for*

*TREMONTON CITY CORPORATION*

## August 2021

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*Prepared By:*

*Jones and Associates Consulting Engineers*

*6080 Fashion Point Drive*

*South Ogden, Utah 84403*

*801-476-9767*

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## 5.0 IMPACT FEE FACILITIES PLAN

### 5.1 Introduction

*This report has been prepared as an update for Section 5.0 of the November 2013 “Storm Drain System Capital Facilities Plan & Impact Fee Facilities Plan”. It is meant as a full replacement for that section. Any references to Sections in this updated document are references to the 2013 report unless it has been updated here.*

The Storm Drain System Impact Fee will be enacted as a means for new development to pay for their impact on the existing and future storm drain system. Utah state law requires that an Impact Fee Facilities Plan (IFFP) be prepared before an Impact Fee can be implemented. The law requires that the IFFP only contain the costs for short term (6-10 year) growth, and it must also not raise the existing level of service. This section will summarize information from Sections 1-4 of the above mentioned Capital Facilities Plan as it pertains to the enactment of the impact fee.

Title 11-36a, Section 300, of the Utah State Code outlines the requirements of the Impact Fee Analysis (IFA) which is also required to be prepared before an Impact Fee can be implemented. The IFFP is a subset of the data contained in the Capital Facilities Plan and that information will be summarized in this section. The IFA will be prepared by Zions Bank Public Finance and is contained in a separate document.

### 5.2 Growth Projections

Section 2.3 of the Capital Facilities Plan discusses the long term growth projections for Tremonton City. This section will focus on the growth during the next decade which is the duration of the IFFP, which is the duration of the IFFP.

#### **2013 to 2020**

The growth rate in the 2000's far exceeded the historical growth rate as outlined in Section 2.3. As a result the census population in 2010 was much higher than the historical curve predicted. Over the past few years, with the nationwide housing market crash, the City has seen a much slower rate than the previous decade. It is expected that the population growth will correct itself and continue to follow the historical curve of the growth trendline.

For the 2013 to 2020 period the Capital Facilities Plan uses the actual census count from 2010 and an exponential growth rate to meet the population estimate from Section 2.3 in 2020. The ERU growth is then projected at the same growth rate.

#### **2021 to 2032**

There has been a recent significant increase in development projects, however, at this point there is not enough data to suggest that the 10-year growth projections won't continue to follow the historical curve. This recent trend should be further analyzed with the next IFFP update to determine if a correction should be applied to the growth curve. With that in mind, for the 2021-2032 period, the projected growth rate will follow the equation given in Section 2.3, which is the historical growth rate estimated by the growth equation given in that same section, which is summarized in Table 5.2.1.

**Table 5.2.1 – Population and ERU Projections (IFFP)**

	Population	SD ERU's
2010 (census)	7,647	2,311
2011	7,785	2,353
2012	7,925	2,395
2013	8,068	2,438
2014	8,213	2,482
2015	8,361	2,527
2016	8,512	2,572
2017	8,665	2,619
2018	8,821	2,666
2019	8,980	2,714
2020	9,142	2,763
2021	9,361	2,829
2022	9,584	2,896
2023	9,813	2,965
2024	10,048	3,037
2025	10,287	3,109
2026	10,533	3,183
2027	10,784	3,259
2028	11,041	3,337
2029	11,304	3,416
2030	11,573	3,497
2031	11,848	3,580
2032	12,130	3,666

### 5.3 Level of Service

Chapter 3.20 of Tremonton City's General Public Works Construction Standards and Specifications states that the piping system shall control the 10 year storm, and the streets and detention basins shall control the 100 year storm. The detention basins are allowed to release storm water into the storm drain system (where possible) at a rate of 0.1 cfs per acre for the Malad River drainage and 0.05 cfs per acre for the Salt Creek and Mill Ditch drainage. The existing storm drainage system was analyzed using these parameters. Further discussion of the methodology for



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this analysis is found in Section 3. The City's proposed level of service during this IFFP period will equal the existing level of service in the system.

Any part of the existing storm drainage system that is not able to handle the flow under these parameters does not meet the City's established level of service, and it is considered deficient. The table in Section 4.3 summarizes all the capital facilities project's estimated costs. If a project, or portion of a project, corrects an existing deficiency; the costs associated with that correction are shown in the column labeled "Current Deficiency or Upgrade". Any other costs that are not associated with growth, such as system upgrades, are also shown in that column. These costs shall not be considered in the calculation of the Impact Fee.

#### **5.4 Future Development Needs**

With so much ground that remains undeveloped, it is nearly impossible to predict where growth will happen over the next 10 years. The most active development areas at this time are shown on the Project Location Map (Figure 5.4.1) along with the locations of the proposed Impact Fee Projects. Projects will be chosen, however, to serve the need where the development arises.

Table 5.4.1 below shows the projects most likely to be constructed in the next 10 years. The column labeled The "Developer Participation" column represents the parts of capital improvement projects that will be paid for by developers to facilitate their development and are the parts of the improvements that will serve only their development (i.e. Project Improvements as defined UCA 11-36a-102). The column labeled "Impact Fee Improvements" are the portions of the projects that should be paid for through Impact Fees (i.e. System Improvements as defined in UCA 11-36a-102).

**Table 5.4.1 – Most Likely Capital Improvement Projects**

<b>Proj.</b>	<b>Project Description</b>	<b>New ERU's Served</b>	<b>Current Deficiency</b>	<b>Developer Participation</b>	<b>Impact Fee Improvements</b>	<b>% Impact Fee Qual.</b>	<b>Total</b>
11	River Valley west piping and detention pond – BR Mountain Road and 2650 West	543	\$0.00	\$251,004.00	\$970,775.00	79%	<b>\$1,221,779.00</b>
12	River Valley east piping and detention pond – BR Mountain Road and 2650 West	202	\$0.00	\$338,208.00	\$549,666.00	62%	<b>\$887,874.00</b>
20	300 S. 1600 W: Regional Detention Basin and Piping	168	\$0.00	\$140,556.00	\$494,136.50	78%	<b>\$634,692.50</b>
27	100 East at I-15. Regional detention pond and piping	282	\$0.00	\$301,041.00	\$834,860.00	73%	<b>\$1,135,901.00</b>
32	600 North from 900 West to Malad River (modified from CFP)	132	\$0.00	\$91,065.00	\$1,158,300.00	93%	<b>\$1,249,365.00</b>
35 & 36	Combination of Projects 35 & 36. River's Edge / Holmgren East Regional Park and Detention Pond	291	\$0.00	\$185,983.20	\$999,752.00	84%	<b>\$1,185,735.20</b>
	<b>Totals</b>		<b>\$0.00</b>	<b>\$1,307,857.20</b>	<b>\$5,007,489.50</b>	<b>76%</b>	<b>\$6,315,346.70</b>



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**Figure 5.4.1 – IFFP Capital Improvement Project Location Map**

## 5.5 Existing Facilities with Excess Capacity

Following is a list of existing storm drain facilities with excess capacity for new growth. The original construction costs have been documented and the Impact Fee includes a buy-in component for the excess capacity that was paid for previously.

**Table 5.5.1 – Existing Facilities with Remaining Capacity**

Date Const.	Project Location/Description	Project Cost	Acres Served	Acres Developed	Acres remaining to be served	ERU's remaining to be served
2005	1000 North storm drain (ditch)	\$134,208	257	62	195	474
2011	Spring Acres storm drain detention basin expansion	\$92,602	67	42	25	62
2018	Main Street storm drain	\$549,580	229	195	34	102
2018	Central Canal Storm Drain	\$181,237	37	10	27	75

## 5.6 Funding Source Options

### Grants

The city is unaware of any potential grant sources for the storm drain system. However, should it be the recipient of any such grants, it will then look at the potential to reduce impact fees.

### Bonds

The city has no outstanding bonds for the storm drain system. While the City could issue bonds in the future to fund storm drain facilities, no bonds are currently being contemplated and therefore no costs associated with bond issuance have been included in the calculation of impact fees.

### Transfer from General Fund

To the extent that the City can generate net revenues in its General Fund, it may choose to transfer all or a portion of the net revenues to the City's capital fund for the storm drain system. It is most likely that, if net revenues should be generated, they will be used to replace aging facilities.

### Impact Fees

Because of the growth anticipated to occur in the city, impact fees are a viable means of allowing new development to pay for its impacts on the existing system. The city finds that it is necessary to impose impact fees to maintain the proposed level of service for the sanitary sewer collection system. The city plan for financing these system improvements relies upon impact fees. This IFFP is developed in accordance with legal guidelines so that an Impact Fee Analysis for the storm drain system may be prepared, and that the City may charge impact fees for said system.

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### **Anticipated or Accepted Dedications of System Improvements**

Any item that a developer funds must be included in the IFFP if a credit against impact fees is to be issued and must be agreed upon with the City before construction of the improvements.

### **5.7 Certification**

The following certification is required in the Utah State Code Section 11-36a-306.

"I certify that the attached impact fee facilities plan:

1. includes only the costs of public facilities that are:
  - a. allowed under the Impact Fees Act; and
  - b. actually incurred; or
  - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
  - a. costs of operation and maintenance of public facilities;
  - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
  - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act."

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Chris L. Breinholt, P.E. – City Engineer



## Appendix E- Impact Fee Facilities Plan for Transportation

# Impact Fee Facilities Plan Certification (11-36a-306)

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I certify that the attached impact fee facilities plan:

1. Includes only the costs of public facilities that are:
  - a. allowed under the Impact Fees Act; and
  - b. actually incurred; or
  - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
  - d. existing deficiencies documented as such and not meant for inclusion in impact analysis.
2. Does not include:
  - a. costs of operation and maintenance of public facilities;
  - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
  - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Complies in each and every relevant respect with the Impact Fees Act

This certification is made with the following limitations:

1. All of the recommendations for implementing this IFFP are followed in their entirety by the City.
2. If any portion of the IFFP is modified or amended in any way, this certification is no longer valid.
3. All information presented and used in the creation of this IFFP is assumed to be complete and correct, including any information received from the City or other outside source.

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Kevin J. Croshaw, P.E.



# Transportation Impact Fee Facilities Plan Summary

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## Introduction

The Impact Fee Facilities Plan (IFFP) was prepared to meet the requirements of Section 11-36a of the Utah State Impact Fee Code. The purpose of the IFFP is to identify master planned roadway infrastructure projects that are eligible for impact fees, estimate the implementation costs associated with those projects that are eligible for impact fees, and estimate the available capacities in the existing roadway network that are eligible for reimbursement through impact fees.

## Existing Level of Service

According to the Impact Fee Act, level of service (LOS) is defined as “the defined performance standard or unit of demand for each capital component of a public facility within a service area.” The LOS of a roadway segment or intersection is used to determine if capacity improvements are necessary. LOS is measured on a roadway segment using its daily traffic volume and at an intersection based on the average delay per vehicle. A standard of LOS D was chosen as the acceptable LOS for Tremonton City.

## Future Demand

The basis of the future travel demand was projected using a Travel Model (TD). The TD was used to project existing traffic conditions into the future using the PTV Vistro 2020 software. This software works by assigning trips to the roadway network based on existing and future data included in ITE’s Trip Generation Manual. Each trip includes an origin, destination, and path between the two. As there are a significant number of origin and destinations within Tremonton City, the City was split into eight Development Zones (DZ). This reduces the complexity of the model while maintaining the accuracy of future traffic demand in the City. Each Development Zone acts as an origin or destination. All trips generated within each zone are assigned to another development zone.

## Project Cost Attributable to Future Demand

Utilizing the TD projections, a 10-year Capital Facilities Plan was created outlining the projects necessary to maintain adequate LOS throughout the City. This includes existing improvements as well as new roadways based on projected new development. All projects included in the 10-year Capital Facilities Plan were assigned a project year based on expected development. Only the projects from 2020-2030 are impact fee eligible. For all impact fee eligible projects, reductions were calculated based on existing deficiencies, excess capacity, pass-through traffic, and existing user share. Of the **\$4,113,680** required from Tremonton to build the expected roadway projects from 2020-2030, **\$197,420** is eligible to be paid using impact fees. The additional impact fee eligible cost over 50 years (collected after this impact fee period) is **\$3,375,000**. Which is referred to as buy-in and will be collected in future impact fee periods.



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# Tremonton

## Impact Fee Facilities Plan

July 22, 2021

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# Impact Fee Facilities Plan

## Introduction

The purpose of an Impact Fee Facilities Plan (IFFP) is to identify public facilities that are needed to accommodate development, and to determine which projects may be funded with impact fees. Utah law requires communities to prepare an IFFP prior to preparing an impact fee analysis and establishing an impact fee. According to Title 11, Chapter 36a-302 of the Utah Code, the IFFP is required to identify the following:

- **The existing level of service**
- **A proposed level of service**
- **Any excess capacity to accommodate future growth at the proposed level of service**
- **The demands placed on existing public facilities by new development**
- **A proposed means by which the local political subdivision will meet those demands**
- **A general consideration of all potential revenue sources to finance the impacts on system improvements**

This analysis incorporates the information provided in the Tremonton Transportation Master Plan (TMP) regarding the upcoming demands on the existing infrastructure facilities that will require improvements to accommodate future growth and provide an acceptable LOS. Reference should be made to the previous chapters for additional information on the evaluation methodology and how the projections were made.

This section focuses on the improvements that are projected to be needed over the next ten years. Utah law requires that any impact fees collected for those improvements be spent within six years of being collected. Only capital improvements are included in this plan; all other maintenance and operation costs are assumed to be covered through the City's General Fund as tax revenues increase as a result of additional development.

## Existing Level of Service (11-36a-302.1.a.i)

According to the Impact Fee Act, level of service is defined as "the defined performance standard or unit of demand for each capital component of a public facility within a service area." The LOS of a roadway segment or intersection is used to determine if capacity improvements are necessary. LOS is measured on a roadway segment using its daily traffic volume and at an intersection based on the average delay per vehicle. A standard of LOS D was chosen as the acceptable LOS for Tremonton City. This allows for speeds at or near free-flow speeds, but with less freedom to maneuver. At intersections, LOS D means that vehicles should not have to wait more than one cycle to proceed through the intersection and experience delays less than 35 seconds, according to the Highway Capacity Manual 2010. [Table 1](#) below summarizes the capacities for roadway segments used by Tremonton City at LOS D.





# Tremonton

## Impact Fee Facilities Plan

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Table 1: Capacity Criteria in Vehicles per Day at LOS D

Lanes	Arterial	Collector
2	11,500	10,500
3	13,000	11,500
5	30,500	25,000
7	46,000	N/A

### Intersection Standards

The performance of intersections has a large effect on the level of service of the roadway network. Intersections have different control types such as: no control, stop control, signal, roundabout, or yield. The level of service for each type of intersection is calculated depending on its control type. Intersection improvements will be necessary in some cases to maintain the desired level of service. One method to reduce costs is to coordinate the placement of signal wiring, foundations, and other features with roadway construction before the placement of the actual traffic signals and other elements are needed. The costs of these intersection improvements have been included in the roadway network cost estimates in [Table 4](#). The total costs for the full installation of these intersection improvements may be postponed, depending on the specific needs of the intersections in the future.

### Trips

The unit of demand for transportation impact is the daily trip. A daily trip is defined by the Institute of Transportation Engineers (ITE) as a single or one-directional vehicle movement to or from a site on a single day. The total traffic impact of a new development can be determined by the sum of the total number of trips generated by a development during the day. This trip generation number or impact can be estimated for an individual development using the ITE Trip Generation Manual (currently 10<sup>th</sup> edition). This publication uses national data studied over decades to assist traffic engineering professionals to determine the likely impact of new development on transportation infrastructure.

An additional consideration is that certain type of developments creates either primary trips, pass-by trips or both, do not generate primary trips or trips that originated for the sole purpose of visiting that development. An example of a primary trip is a home-based work trip where someone leaves their house with the express purpose of going to work. This primary trip has been generated by a combination of the home the trip originated in and the place of occupation where the trip is terminated. Thus, it is easily understood that the impact of this trip should be attributed to the housing development and workplace development, without either of these locations, the trip doesn't happen.

Some trips are not primary trips, they are defined as pass-by trips. This essentially means that the trip (crossing the Driveway of a development) was generated by a Driver deciding to make a stop on their way to their primary destination. Good examples of pass-by trips are someone that stops at the gas station on their way to work (a gas station is a pass-by trip) or a Driver that is enticed to stop at a fast food restaurant as they drive by because the HOT DONUTS sign is illuminated (the fast food restaurant is a pass-by trip). Pass-by trips do not add traffic to the roadway and therefore do not create additional impact. Each land use type in the ITE Trip Generation Manual has a suggested reduction for pass-by trips



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## Impact Fee Facilities Plan

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where applicable. In each case, the trip reduction rate has been applied to the trip generation rate used in this IFFP.

### System Improvements and Project Improvements

---

As described in the TMP, there are four primary classifications of roads, including local streets, collectors, arterials, and freeways/expressways. Tremonton City classifies street facilities based on the relative amounts of through and land-access service they provide. Local streets primarily serve land-access functions, while freeways and expressways are primarily meant for mobility. Each classification may have a variable number of lanes, which is a function of the expected traffic volume and serves as the greatest measure of roadway capacity.

Improvements to arterials are considered “system improvements” according to the Utah Impact Fee Law, as these streets serve users from multiple developments. System improvements may include anything within the roadway such as curb and gutter, asphalt, road base, lighting, and signing for collectors and arterials. These projects are eligible to be funded with impact fees and are included in this IFFP.

### Proposed Level of Service (11-36a-302.1.a.ii)

The proposed level of service provides a standard for future roadway conditions to be evaluated against. This standard will determine whether or not a roadway will need improvements or not. According to the Utah Impact Fee Law, the proposed level of service may:

1. Diminish or equal the existing level of service
2. Exceed the existing level of service if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service; or
3. Establish a new public facility if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

This IFFP will not make any changes to the existing level of service, and LOS D will be the standard by which future growth will be evaluated.





# Tremonton

## Impact Fee Facilities Plan

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### Existing Capacity to Accommodate Future Growth (11-36a-302.1.a.iii)

An important element of the IFFP is the determination of excess capacity on the existing roadway network. Excess capacity is defined as the amount of available capacity on any given street in the roadway network under existing conditions. This capacity is available on any given street in the roadway network under existing conditions. This represents available capacity for new development in the city before additional infrastructure will be needed. This represents a buy-in component from the City as the existing residents/property owners have already paid for these improvements. Included is the determination of excess capacity in the existing roadway network. Excess capacity is defined as the amount of available capacity on any given street in the roadway network under existing conditions. **Table 2** represents the excess capacity that Tremonton has constructed. A positive excess capacity represents available capacity for new development in the City before additional infrastructure will be needed. This represents a buy-in component for the City as the existing residential/property owners/developers are to proportionately reimburse the City for its actual cost of excess capacity in these improvements. The portion of these roadways which are calculated as the buy-in components of the impact fee is included in the Impact Fee Analysis (IFA). Existing roadway segments with a negative existing excess capacity in **Table 2** (existing deficiencies under the Impact Fee Act) would undergo capacity improvements not funded with Impact Fee revenues. The roadways shown in **Table 2** are part of recently constructed roadway projects with a total upside cost to Tremonton of **\$853,423.51**. The percentage of this Tremonton cost is included in the buy-in component of the impact fee as shown in **Table 2**. Project costs contained in **Table 2** are exact costs provided by Tremonton City.

Table 2: Existing and 2030 Excess Capacity/Deficiency Calculations in Existing Roadways

Road Name	Functional Classification	Existing Capacity	Existing Volume	Excess Capacity/Deficiency	Excess Capacity/Deficiency %	2030 Capacity (Projects Included)	2030 Volumes	2030 Excess Capacity/Deficiency	2030 Excess Capacity/Deficiency %	Project Cost
BR Mountain Road	Minor Arterial	13,000	10	12,990	99%	13,000	2,000	11,000	85%	\$568,865.64
1000 North	Minor Arterial	13,000	2,600	10,400	80%	15,100	5,200	9,900	66%	\$81,765.23
Main Street (Iowa String)	Major Arterial	13,000	9,800	3,200	25%	15,100	13,500	1,600	11%	\$64,541.20
Main Street (650 W)	Major Arterial	32,800	9,800	23,000	70%	32,800	13,500	19,300	59%	\$138,251.44
Total										<b>\$853,423.51</b>



## Demands Placed on Facilities by New Development (11-36a-302.1.a.iv)

To meet the requirements of the Utah Impact Fee law, to “identify demands placed upon existing public facilities by new development activity at the proposed level of service” and to “identify the means by which the political subdivision or private entity will meet those growth demands”, the following steps were completed and are explained in further detail in the following sections:

1. **Existing Demand** – The traffic demand at the present time was estimated using traffic counts and population data.
2. **Existing Capacity** – The capacity of the current roadway network was estimated using the calculated LOS.
3. **Existing Deficiencies** – The deficiencies in the current network were identified by comparing the LOS of the roadways to the LOS standard.
4. **Future Demand** – The future demand on the network was estimated using development projections.
5. **Future Deficiencies** – The deficiencies in the future network were identified by comparing the calculated future LOS with the LOS standard.
6. **Recommended Improvements** – Recommendations were made that will help meet future demands.

### Existing Roadway Network Conditions

---

#### *Conversions of Growth and Development Projections to Trip Generations*

---

The basis of the future travel demand (TD) was projected using the PTV Vistro 2020 software. This software works by assigning trips to the roadway network based on existing and future data included in ITE’s Trip Generation Manual. Each trip includes an origin, destination, and path between the two. As there are a significant number of origin and destinations within Tremonton City, the City was split into eight development zones (DZ). This reduces the complexity of the model while maintaining the accuracy of future traffic demand in the City. Each Development Zone acts as an origin or destination. All trips generated within each zone are assigned to another development zone.

#### *Existing Functional Classification and Level of Service*

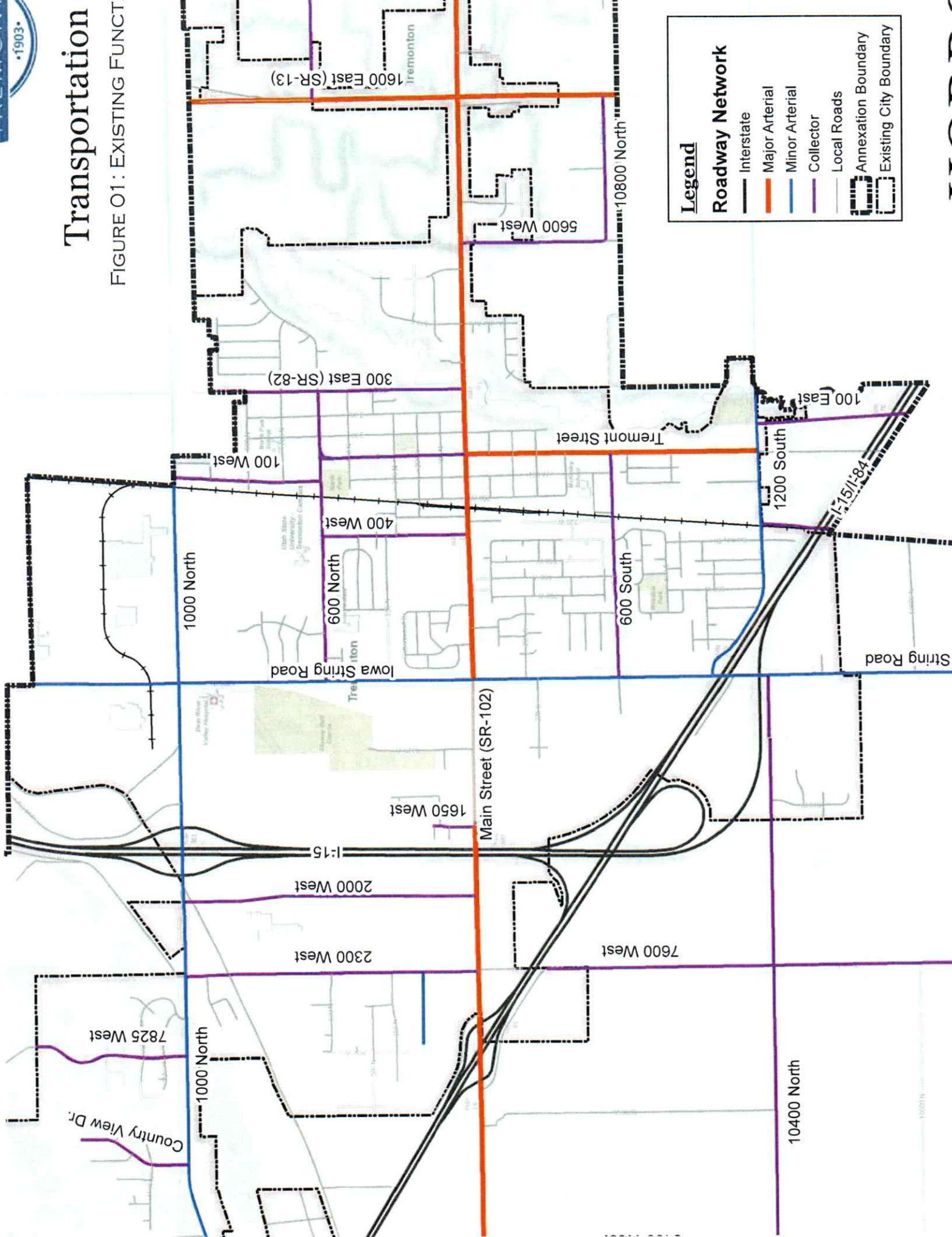
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The existing functional classification is shown in **Figure 1**. The LOS was calculated according to the guidelines explained in the Level of Service section for the existing roadway network and is included in **Figure 2**.



# Transportation

FIGURE 01: EXISTING FUNCTION



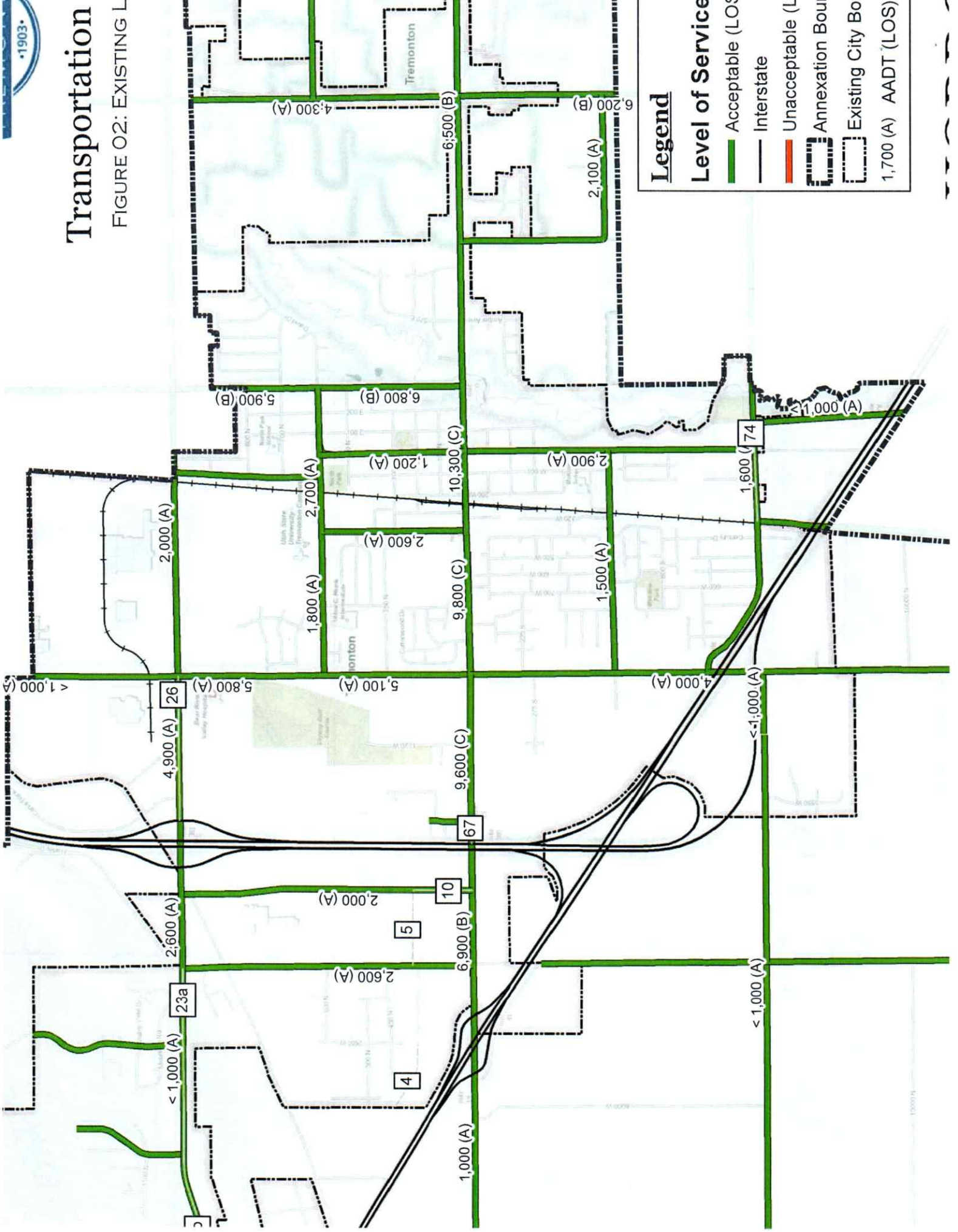
**Legend**

**Roadway Network**

- Interstate
- Major Arterial
- Minor Arterial
- Collector
- Local Roads
- Annexation Boundary
- Existing City Boundary

# Transportation

FIGURE O2: EXISTING L







# Tremonton

## Impact Fee Facilities Plan

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### Mitigations to Existing Capacity Deficiencies

Using LOS D as the threshold for roadway improvements in **Figure 2** (Indicated by red lines), there are no roadways that have existing capacity deficiencies:

#### Roadway Segments at or below LOS E:

- **None, no mitigation needed**

#### Intersections with existing deficiencies:

- **None, no mitigation needed**

In most cases, roadway capacity improvements are achieved by adding travel lanes. In some cases, additional capacity can be gained by striping additional lanes where the existing pavement width will accommodate it. This can be accomplished by eliminating on street parking, creating narrower travel lanes, and adding two-way left turn lanes where they don't currently exist. For all roadway capacity improvements, it is recommended to investigate other mitigation methods before widening the roadway.

### 10-Year Capital Facilities Plan

Although projects will be completed as growth and development occurs throughout the city, the existing, no build scenarios and City estimates and projections for growth are used as a basis to predict the necessary projects to include in the IFFP. **Figure 3** and **Table 3** show the Capital Facilities Plan, which forecast all necessary improvements for the next ten years. This includes all of the projects regardless of their eligibility for impact fee expenditure. Project costs are included in **10 Year Capital Facilities Plan Cost Summary**.

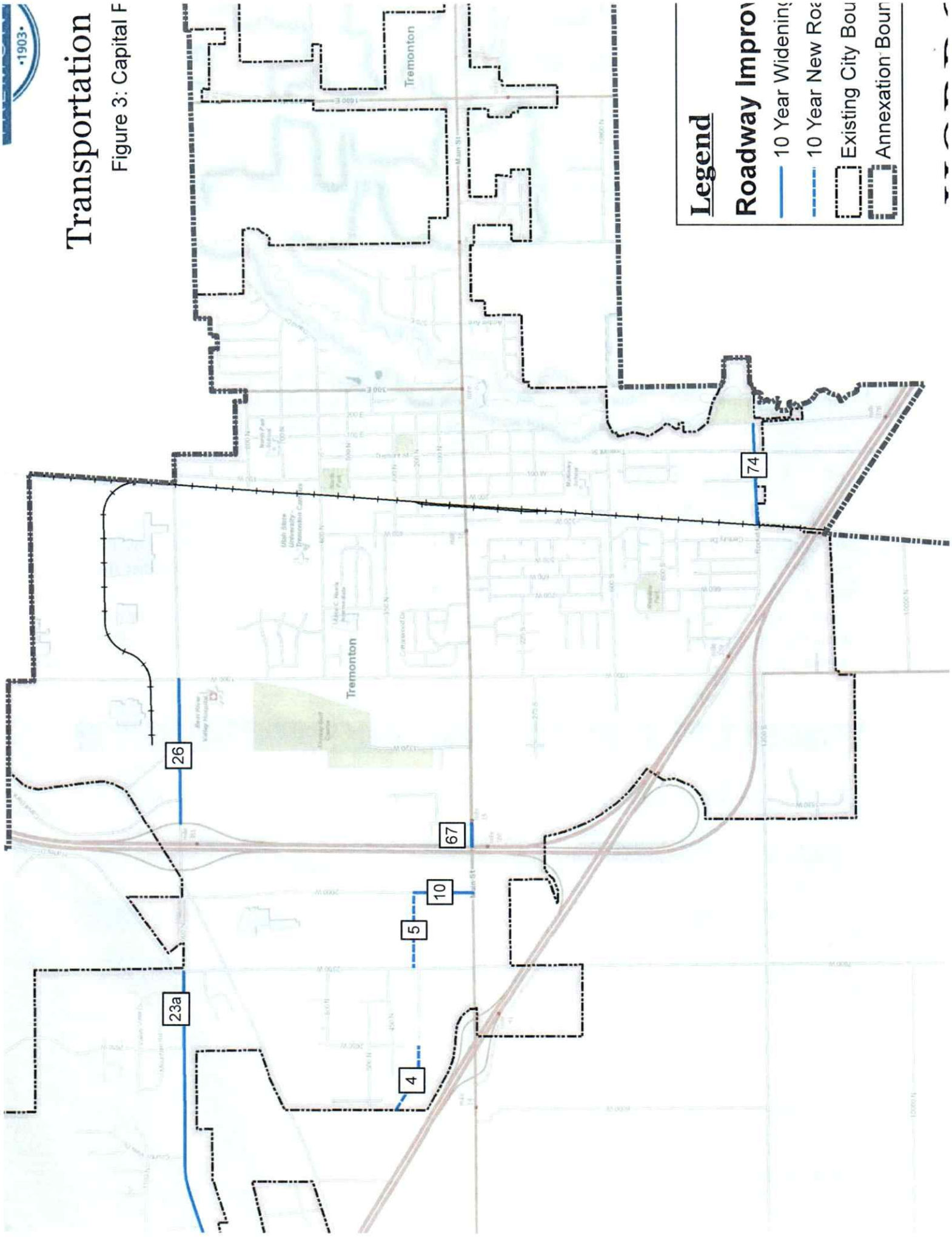
Table 3: Capital Facilities Plan Projects

Project	Location	Funding Source
4.	BR Mountain Road: 2650 West to west border	Tremonton City
5.	BR Mountain Road: 2300 West to Main Street	Tremonton City
10.	2000 West Realignment to Project #4	Tremonton City
23a.	1000 North: 2300 West to 2650 West	Tremonton City
23b.	1000 North: 3100 West/Country View Drive to 2650 West	Tremonton City/UDOT*
26	1000 North: 1500 West to Iowa String Road	Tremonton City
67	Main Street Widening: Install Turn Lane at 1650 West	Tremonton City
74	1200 South Widening: 100 East to Railroad Tracks	Tremonton City

\*The City anticipates receiving \$1,500,000 from UDOT's Small Urban Fund for this project

# Transportation

Figure 3: Capital F







# Tremonton

## Impact Fee Facilities Plan

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### Infrastructure Required to Meet Demands of New Development (11-36a-302.1.a.v)

#### Project Cost Attributable to 10-year Growth

**Table 4** shows the funding sources for IFFP projects costs attributable to new growth as a percentage of the total project. A portion of each project in **Table 4** is impact fee eligible, depending on how it is funded. Only that portion of a project cost funded by Tremonton is impact fee eligible. For each project, that amount is indicated in the **Tremonton City %** and **Tremonton City Total** columns.

There are additional costs included in each cost estimate based on a percentage of the construction costs. The four additional costs include contingency, mobilization, preconstruction engineering, and construction engineering. The percentages used for the additional costs may vary as these values are estimated for each individual project. These estimates are based on the concept cost estimate values used by UDOT. Contingency accounts for the items not estimated during the concept cost estimate. Examples include roadway striping, utility placement, and survey. Contingency costs can range up to 25% based on the number of items not estimated. Mobilization is the preparation before construction begins on a project. It is recommended that a value of 10% be used for project mobilization. Preconstruction engineering is based on the complexity of the project as well as the construction costs. It is recommended that for local projects the preconstruction costs can range up to 16% of the construction costs. For the cost estimates included in this IFFP, a value of 10% was used. Construction engineering includes the construction management and additional design necessary during construction. Recommended costs for local projects range up to 16% and a value of 10% was used for the cost estimates included in the IFFP. All cost estimates along with all unit costs and assumptions are included in **IFFP Cost Estimates**.

Table 4: Impact Fee Facilities Plan Project Funding Sources

Project	Location	Total Price	Funding Source	Tremonton City %	Tremonton City Total
4.	BR Mountain Road: 1000 North to 2300 West	\$385,000	Tremonton City	100%	\$385,000
5.	BR Mountain Road: 2300 West to Main Street	\$1,119,000	Tremonton City	22%	\$246,180
10.	2000 West Realignment to Project #4	\$344,000	Tremonton City	100%	\$344,000
23a.	1000 North: 2300 West to 2650 West	\$650,000	Tremonton City	100%	\$650,000
23b.	1000 North: 3100 West/Country View Drive to 2650 West	\$100,500	Tremonton City/UDOT	100%	\$100,500
26	1000 North: 1500 West to Iowa String Road	\$667,000	Tremonton City	100%	\$667,000
67	Main Street Widening: Install Turn Lane at 1650 West	\$129,000	Tremonton City	100%	\$129,000
74	1200 South Widening: 100 East to Railroad Tracks	\$1,592,000	Tremonton City	100%	\$1,592,000
<b>Total</b>		<b>\$4,990,000</b>			<b>\$4,113,680</b>



# Tremonton

## Impact Fee Facilities Plan

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### Project Cost Attributable to 10-Year Growth

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Using the travel demand model mentioned in previous sections it is possible to estimate the number of daily trips originating or terminating in Tremonton for the existing and future conditions. The difference between the future daily trips and the existing daily trips (the number of new trips in the City) becomes the denominator in the equation used to calculate the impact fee cost per Daily trip for new development. The City of Tremonton currently generates approximately 2,803 one-way Daily trips. The projected 2030 daily trip number for Tremonton City is 4,669, a 67% increase on today's value. This gives a total increase of 1,866 trips.

Included in the IFFP are reductions to the City's total cost that are not attributed to growth. The reductions included in the following sections are for existing deficiencies, pass-through, existing user share for new construction projects, and excess capacity that will not be consumed through 2030. These are calculated based on the projected 2030 traffic volumes as well as output data from the TD.

Also included are the reductions for traffic signals. Traffic signals are implemented based on the traffic signal warrants found in Chapter 4C of the Utah Manual on Uniform Traffic Control Devices (MUTCD). Included in the MUTCD are warrants based of traffic volumes, pedestrian volumes, safety, as well as the roadway network in proximity to the intersection. A traffic signal is not installed without meeting one of the signal warrants included in the Utah MUTCD. To estimate the reductions for existing deficiencies, pass-through, and excess capacity, the weighted average of the two intersecting streets was used.

### Existing Deficiency Reduction

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This proportionate cost of added lane capacity will remedy an existing capacity deficiency that cannot be funded using Impact Fees. There are no existing deficiencies in Tremonton.

### Pass-Through Reduction

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Included in **Table 5** is the percent Pass-Through traffic for all project roadways. A vehicle trip is considered pass-through when the origin and the destination for a specific trip occurs outside the city limits. For all growth within Tremonton, there is a certain percentage of new trips which are considered pass-through. The Travel Demand Model determines pass-through traffic by keeping track of the origin, destination, and path for each vehicle trip generated. When the vehicle trip uses a roadway in Tremonton and the origin and destination of that trip is located outside of Tremonton, that trip is considered a pass-through trip. Since a pass-through trip does not arise from new development activity in Tremonton, it cannot be paid for with impact fees. The proportion of pass-through traffic not attributable to impact fees is the proportion of pass-through traffic to the added capacity of the roadway.





# Tremonton

## Impact Fee Facilities Plan

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Table 5: Pass-Through Traffic Cost Reduction Calculation

Project	Location	Added Capacity	Pass-Through Volume	Pass Through %
4.	BR Mountain Road: 2650 West to west border	13,000	20	1%
5.	BR Mountain Road: 2300 West to Main Street	13,000	20	1%
10.	2000 West Realignment to Project #4	1,500	10	1%
23a.	1000 North: 2300 West to 2650 West	1,500	20	1%
23b.	1000 North: 3100 West/Country View Drive to 2650 West	1,500	20	1%
26	1000 North: 1500 West to Iowa String Road	1,500	30	1%
67	Main Street Widening: Install Turn Lane at 1650 West	1,500	40	1%
74	1200 South Widening: 100 East to Railroad Tracks	1,500	10	1%

### Excess Capacity Reduction

Included in **Table 6** is the calculated excess capacity remaining in 2030. The excess capacity is the proportion of the added capacity constructed during this IFFP period that is not used in 2030. Since this capacity is not used by 2030, it is not a cost of growth in this IFFP period, but can be recouped in a later IFFP period. The future capacity is the total capacity of the roadway after construction and the added capacity is the capacity added to the existing capacity of the roadway.

Table 6: Excess Capacity Cost Reduction Calculations

Project	Location	Future Capacity	Added Capacity	2030 Traffic Volume	2030 Excess Capacity	Cost Reduction %
4.	BR Mountain Road: 2650 West to west border	13,000	13,000	1,500	11,500	88%
5.	BR Mountain Road: 2300 West to Main Street	13,000	13,000	2,000	11,000	85%
10.	2000 West Realignment to Project #4	13,000	1,500	3,400	9,600	100%
23a.	1000 North: 2300 West to 2650 West	13,000	1,500	2,900	10,100	100%
23b.	1000 North: 3100 West/Country View Drive to 2650 West	13,000	1,500	2,900	10,100	100%
26	1000 North: 1500 West to Iowa String Road	13,000	1,500	7,400	5,600	100%
67	Main Street Widening: Install Turn Lane at 1650 West	13,000	1,500	13,100	0	0%
74	1200 South Widening: 100 East to Railroad Tracks	13,000	1,500	3,000	10,000	100%





# Tremonton

## Impact Fee Facilities Plan

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### Existing User Share for New Construction Projects

For all roadways in the roadway system, a portion of the traffic volume will be used by the existing roadway users. For existing roadways, the existing user share is the existing roadway volume. For new construction, a proportion of the new traffic volume is attributed to those existing users who will use the road. **Table 7** shows the reduction based on the existing user share for all new roadway construction.

Table 7: Existing User Share Cost Reduction Calculation

Project	Location	Added Capacity	Existing User Volume	Existing User %
4.	BR Mountain Road: 2650 West to west border	13,000	124	1%
5.	BR Mountain Road: 2300 West to Main Street	13,000	124	1%
10.	2000 West Realignment to Project #4	1,500	54	1%
23a.	1000 North: 2300 West to 2650 West	1,500	132	1%
23b.	1000 North: 3100 West/Country View Drive to 2650 West	1,500	86	1%
26	1000 North: 1500 West to Iowa String Road	1,500	15	1%
67	Main Street Widening: Install Turn Lane at 1650 West	1,500	43	1%
74	1200 South Widening: 100 East to Railroad Tracks	1,500	26	1%

### Proportion Attributable to Growth Summary and Costs

Impact fees can only be collected for the proportion of the added capacity which is used by new development that is projected to occur through 2030, this IFFP period. **Table 8** is a summary table that accounts for all cost reductions attributed to existing user share, pass-through, and excess capacity.

Table 8: Proportion of Projects Attributed to New Development

Project	Location	Cost Reduction For				Proportion Attributable to Growth
		Existing Deficiency	User Share	Pass-Through	Excess Capacity	
4.	BR Mountain Road: 2650 West to west border	0%	1%	1%	88%	10%
5.	BR Mountain Road: 2300 West to Main Street	0%	1%	1%	85%	13%
10.	2000 West Realignment to Project #4	0%	1%	1%	100%	0%
23a.	1000 North: 2300 West to 2650 West	0%	1%	1%	100%	0%
23b.	1000 North: 3100 West/Country View Drive to 2650 West	0%	1%	1%	100%	0%
26	1000 North: 1500 West to Iowa String Road	0%	1%	1%	100%	0%
67	Main Street Widening: Install Turn Lane at 1650 West	0%	1%	1%	0%	100%
74	1200 South Widening: 100 East to Railroad Tracks	0%	1%	1%	100%	0%





# Tremonton

## Impact Fee Facilities Plan

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Using the proportion attributed to future growth in [Table 8](#), the cost attributable to future growth is calculated in [Table 9](#). Of the **\$4,113,680** required by Tremonton for roadway improvements, **\$197,420** is eligible to be paid using impact fees. All assumptions, rates and specific project costs are found in [IFFP Cost Estimates](#).

Table 9: Cost Attributable to Growth

Project	Location	Total Cost	Tremonton City Total	Proportion Attributable to Growth	Cost Attributable to Growth
4.	BR Mountain Road: 2650 West to west border	\$385,000	\$385,000	10%	\$39,000
5.	BR Mountain Road: 2300 West to Main Street	\$1,119,000	\$246,180	13%	\$32,000
10.	2000 West Realignment to Project #4	\$344,000	\$344,000	0%	\$0
23a.	1000 North: 2300 West to 2650 West	\$650,000	\$650,000	0%	\$0
23b.	1000 North: 3100 West/Country View Drive to 2650 West	\$100,500	\$100,500	0%	\$0
26	1000 North: 1500 West to Iowa String Road	\$667,000	\$667,000	0%	\$0
67	Main Street Widening: Install Turn Lane at 1650 West	\$129,000	\$129,000	98%	\$126,420
74	1200 South Widening: 100 East to Railroad Tracks	\$1,592,000	\$1,592,000	0%	\$0
<b>Total</b>		<b>\$4,990,000</b>	<b>\$4,113,680</b>		<b>\$197,420</b>

## Proposed Means to Meet Demands of New Development (11-36a-302.2)

All possible revenue sources have been considered as a means of financing transportation capital improvements needed as a result of new growth. This section discusses the potential revenue sources that could be used to fund transportation needs as a result of new development.

Transportation routes often span multiple jurisdictions and provide regional significance to the transportation network. As a result, other government jurisdictions or agencies often help pay for such regional benefits. Those jurisdictions and agencies could include the Federal Government, the State Government or UDOT. The City will need to continue to partner and work with these other jurisdictions to ensure the adequate funds are available for the specific improvements necessary to maintain an acceptable LOS. The City will also need to partner with adjacent communities to ensure corridor continuity across jurisdictional boundaries (i.e., arterials connect with arterials; collectors connect with collectors, etc.).

Funding sources for transportation are essential if Tremonton City recommended improvements are to be built. The following paragraphs further describe the various transportation funding sources available to the City.





# Tremonton

## Impact Fee Facilities Plan

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### Federal Funding

---

Federal monies are available to cities and counties through the federal-aid program. UDOT administers the funds. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) funds projects for any roadway with a functional classification of a collector street or higher as established on the Functional Classification Map. STP funds can be used for both rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the state in urban areas. Another portion of the STP funds can be used for projects in any area of the state at the discretion of the State Transportation Commission. Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Committee reviews the applications and then a portion of the application is passed to the State Transportation Commission. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities, and water runoff mitigation. Other federal and state trail funds are available from the Utah State Parks and Recreation Program.

### State/County Funding

---

The distribution of State Class B and C Program monies is established by State Legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, Driver license fees, inspection fees, and transportation permits. Seventy-five percent of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities. There are several significant roads in Tremonton that fall under UDOT jurisdiction, it is in the interests of the City that staff is aware of the procedures used by UDOT to allocate those funds and to be active in requesting the funds be made available for UDOT owned roadways in the City.

Class B and C funds are allocated to each city and county by a formula based on population, centerline miles, and land area. Class B funds are given to counties, and Class C funds are given to cities and towns. Class B and C funds can be used for maintenance and construction projects; however, thirty percent of those funds must be used for construction or maintenance projects that exceed \$40,000. The remainder of these funds can be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

In 2005, the state senate passed a bill providing for the advance acquisition of right-of-way for highways of regional significance. This bill would enable cities in the county to better plan for future transportation needs by acquiring property to be used as future right-of-way before it is fully developed and becomes extremely difficult to acquire. The county is responsible to program and control monies generated by the local corridor preservation fund. In order to qualify for preservation funds, the City must comply with the Corridor Preservation Process found online at [www.udot.utah.gov/public/ucon](http://www.udot.utah.gov/public/ucon).



# Tremonton

## Impact Fee Facilities Plan

July 22, 2021

### City Funding

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Some cities utilize general fund revenues for their transportation programs. Another option for transportation funding is the creation of special improvement districts. These districts are organized for the purpose of funding a single specific project that benefits an identifiable group of properties. Another source of funding used by cities includes revenue bonding for projects intended to benefit the entire community.

Private interests often provide resources for transportation improvements. Developers construct the local streets and collector roads within subdivisions and often dedicate right-of-way and participate in the construction of arterial streets adjacent to their developments. Developers can also be considered a possible source of funds for projects through the use of impact fees. These fees are assessed as a result of the impacts a particular development will have on the surrounding roadway system, such as the need for traffic signals or street widening.

General fund revenues are typically reserved for operation and maintenance purposes as they relate to transportation. However, general funds could be used if available to fund the expansion or introduction of specific services. Providing a line item in the City budgeted general funds to address roadway improvements, which are not impact fee eligible is a recommended practice to fund transportation projects should other funding options fall short of the needed amount.

General obligation bonds are debt paid for or backed by the City's taxing power. In general, facilities paid for through this revenue stream are in high demand amongst the community. Typically, general obligation bonds are not used to fund facilities that are needed as a result of new growth because existing residents would be paying for the impacts of new growth. As a result, general obligation bonds are not considered a fair means of financing future facilities needed as a result of new growth.

Certain areas might require different needs or methods of funding other than traditional revenue sources. A Special Assessment Area (SAA) can be created for infrastructure needs that benefit or encompass specific areas of the City. Creation of the SAA may be initiated by the municipality by a resolution declaring the public health, convenience, and necessity requiring the creation of a SAA. The boundaries and services provided by the district must be specified and a public hearing held prior to creation of the SAA. Once the SAA is created, funding can be obtained from tax levies, bonds, and fees when approved by the majority of the qualified electors of the SAA. These funding mechanisms allow the costs to be spread out over time. Through the SAA, tax levies and bonding can apply to specific areas in the City needing to benefit from the improvements.

### Developer Credit

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Also included in section 11-36a-3014(2)(f) of the Utah Impact Fee Act is a method to provide developer credits. When there is a project included in the IFFP or a project that offsets the demand for a system that is included in the IFFP, that developer is entitled to a credit against the impact fees owed.





# Tremonton

## Impact Fee Facilities Plan

July 22, 2021

### Developer Impact Fees

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Impact fees are a way for a community to obtain funds to assist in the construction of infrastructure improvements resulting from and needed to serve new growth. The premise behind impact fees is that if no new development occurred, the existing infrastructure would be adequate. Therefore, new developments should pay for the portion of required improvements that result from new growth. Impact fees are assessed for many types of infrastructures and facilities that are provided by a community, such as roadway facilities. According to state law, impact fees can only be used to fund growth related system improvements.

### **Necessity of Improvements to Maintain Level of Service**

According to State statutes, impact fees must only be used to fund projects that will serve needs caused by future development. They are not to be used to address present deficiencies. Only projects costs that address future needs are included in this IFFP. This ensures a fair fee since developers will not be expected to address present deficiencies.



Transportation Impact Fee Facilities Plan

# 10 Year Capital Facilities Plan Cost Summary

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50,000	Tremonton City	100%	\$650,000	1,000	1,500	14,200	13,200	130	1%	1%
50,500	Tremonton City, UDOT	100%	\$100,500	1,000	1,500	9,600	8,600	90	1%	1%
57,000	Tremonton City	100%	\$667,000	4,900	1,500	14,700	9,800	100	1%	1%
59,000	Tremonton City	100%	\$129,000	9,600	1,500	13,100	3,500	40	1%	1%
59,200	Tremonton City	100%	\$1,592,000	1,600	1,500	13,600	12,000	120	1%	1%
<b>590,000</b>			<b>\$3,730,000</b>							

Tremonton Impact Fee Calculation										
Unit Price (per Project Year)	Funding Source	Tremonton %	Tremonton Total (Project Year)	Existing Traffic Volume	Added Capacity	2050 Volume	Added Volume	Existing Proportionate Share Volume	Reduction for Existing Proportionate Share	Reduction Existing Proportionate Share
35,000	Tremonton City	100%	\$385,000	0	13,000	12,400	12,400	124	1%	1%
19,000	Tremonton City	100%	\$246,180	0	13,000	12,400	12,400	124	1%	1%
14,000	Tremonton City	100%	\$344,000	2,000	1,500	10,400	8,400	54	1%	1%
50,000	Tremonton City	100%	\$650,000	1,000	1,500	14,200	13,200	132	1%	1%
50,500	Tremonton City, UDOT	100%	\$100,500	1,000	1,500	9,600	8,600	86	1%	1%
57,000	Tremonton City	100%	\$667,000	4,900	1,500	14,700	9,800	15	1%	1%
59,000	Tremonton City	100%	\$129,000	9,600	1,500	13,100	3,500	43	1%	1%
59,200	Tremonton City	100%	\$1,592,000	1,600	1,500	13,600	12,000	26	1%	1%
<b>590,000</b>			<b>\$3,730,000</b>							



# IFFP Cost Estimates

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# BR Mountain Road Expansion Project

## Construct Next Phase of BR Mountain Road

Date: 1/25/2021

Concept Cost Estimate

Location:



Item	Description	Qty	Unit	Unit Price	Total
<b>MINOR ARTERIAL ROADWAY W/ TRAIL (80' ROW)</b>					
1	Clear and Grub Proposed Roadway and Sidewalk area	109,840	sf	\$0.15	\$16,476.00
2	Excavate to Subgrade and General Site Grading	1	ls	\$11,000.00	\$11,000.00
3	Furnish and Install Mirafi RS 2080i Geotextile	7,931	sy	\$2.00	\$15,862.00
4	Furnish and Install Imported Granular Material (14" min)	6,995	ton	\$11.00	\$76,945.00
5	Furnish and Install Road Base (10" min)	5,175	ton	\$16.50	\$85,387.50
6	Furnish and Install Asphalt Pavement (3.5" min)	1,613	ton	\$77.00	\$124,201.00
7	Furnish and Install 30" Curb and Gutter	2,745	lf	\$17.50	\$48,037.50
8	Furnish and Install Concrete Flatwork	13,552	sf	\$6.00	\$81,312.00
9	Furnish and Install Landscape Rock over Weed Barrier	12,353	sf	\$2.00	\$24,706.00
<b>ROADWAY SUBTOTAL =</b>					<b>\$483,927.00</b>
10	Furnish and Install 8" PVC C900 Waterline	1,385	lf	\$33.00	\$45,705.00
11	Furnish and Install Fire Hydrant Assembly	3	ea	\$5,500.00	\$16,500.00
12	Connect to Existing Water	1	ea	\$1,500.00	\$1,500.00
<b>CULINARY WATER SUBTOTAL =</b>					<b>\$63,705.00</b>
13	Furnish and Install 8" PVC Sewer Line	1,245	lf	\$40.00	\$49,800.00
14	Furnish and Install 4' Diameter Sewer Manhole	6	ea	\$3,000.00	\$18,000.00
15	Connect to Existing Sewer	1	ea	\$2,500.00	\$2,500.00
<b>SANITARY SEWER SUBTOTAL =</b>					<b>\$70,300.00</b>
16	Furnish and Install 18" RCP Storm Drain Line	1,400	lf	\$50.00	\$70,000.00
17	Furnish and Install 36" RCP Storm Drain Line	80	lf	\$90.00	\$7,200.00
18	Furnish and Install 48" RCP Storm Drain Line	80	lf	\$100.00	\$8,000.00
19	Furnish and Install 4' Diameter Storm Manholes	5	ea	\$3,000.00	\$15,000.00
20	Furnish and Install Type II Catch Basin	8	ea	\$2,200.00	\$17,600.00
21	Connect to Existing Storm Drain	1	ea	\$2,500.00	\$2,500.00
<b>STORM DRAIN SUBTOTAL =</b>					<b>\$120,300.00</b>
22	Furnish and Install 6" Secondary Water Line	1,215	lf	\$35.00	\$42,525.00
<b>SECONDARY WATER SUBTOTAL =</b>					<b>\$42,525.00</b>
<b>OVERALL PROJECT SUBTOTAL =</b>					<b>\$780,757.00</b>
<b>10%± Contingency &amp; Engineering =</b>					<b>\$78,075.70</b>
<b>TOTAL PROJECT =</b>					<b>\$858,832.70</b>
<b>HERITAGE RESPONSIBILITY (PARCELS A &amp; B) =</b>					<b>\$260,029.22</b>
<b>% OF OVERALL PROJECT =</b>					<b>30.28%</b>
<b>CITY RESPONSIBILITY (ASHFIELD APARTMENTS &amp; REMAINDER) =</b>					<b>\$598,803.48</b>
<b>% OF OVERALL PROJECT =</b>					<b>69.72%</b>
<b>ROADWAY =</b>					<b>\$384,498.18</b>
<b>CULINARY WATER =</b>					<b>\$42,461.10</b>
<b>SANITARY SEWER =</b>					<b>\$47,663.00</b>
<b>STORM DRAIN =</b>					<b>\$92,919.20</b>
<b>SECONDARY WATER =</b>					<b>\$31,262.00</b>





**HERITAGE-PARCEL "A"**

Item	Description	Qty	Unit	Unit Price	Total
<b>MINOR ARTERIAL ROADWAY (66' ROW)</b>					
1	Clear and Grub Proposed Roadway and Sidewalk area	21,318	sf	\$0.15	\$3,197.70
2	Excavate to Subgrade and General Site Grading	1	ls	\$1,870.00	\$1,870.00
3	Furnish and Install Mirafi RS 2080i Geotextile	1,366	sy	\$2.00	\$2,732.00
4	Furnish and Install Imported Granular Material (12" min)	1,205	ton	\$11.00	\$13,255.00
5	Furnish and Install Road Base (8" min)	891	ton	\$16.50	\$14,701.50
6	Furnish and Install Asphalt Pavement (3" min)	280	ton	\$77.00	\$21,560.00
7	Furnish and Install 30" Curb and Gutter	648	lf	\$17.50	\$11,340.00
8	Furnish and Install Concrete Flatwork	2,592	sf	\$6.00	\$15,552.00
9	Furnish and Install Landscape Rock over Weed Barrier	2,915	sf	\$2.00	\$5,830.00
<b>UTILITIES</b>					
10	Furnish and Install 8" PVC C900 Waterline	323	lf	\$33.00	\$10,659.00
11	Furnish and Install Fire Hydrant Assembly	0.75	ea	\$5,500.00	\$4,125.00
12	Connect to Existing Water	0.25	ea	\$1,500.00	\$375.00
13	Furnish and Install 8" PVC Sewer Line	323	lf	\$40.00	\$12,920.00
14	Furnish and Install 4' Diameter Sewer Manhole	1.50	ea	\$3,000.00	\$4,500.00
15	Connect to Existing Sewer	0.25	ea	\$2,500.00	\$625.00
16	Furnish and Install 15" RCP Storm Drain Line	323	lf	\$37.00	\$11,951.00
17	Furnish and Install 4' Diameter Storm Manholes	1.25	ea	\$3,000.00	\$3,750.00
18	Furnish and Install Type II Catch Basin	2.00	ea	\$2,200.00	\$4,400.00
19	Connect to Existing Storm Drain	0.25	ea	\$2,500.00	\$625.00
20	Furnish and Install 6" Secondary Water Line	323	lf	\$35.00	\$11,305.00
<b>SUBTOTAL =</b>					<b>\$155,273.20</b>
<b>10%± Contingency &amp; Engineering =</b>					<b>\$15,527.32</b>
<b>TOTAL =</b>					<b>\$170,800.52</b>
<b>% OF OVERALL PROJECT=</b>					<b>19.89%</b>

**HERITAGE-PARCEL "B"**

Item	PARCEL "B"	Qty	Unit	Unit Price	Total
<b>MINOR ARTERIAL ROADWAY (66' ROW)</b>					
1	Clear and Grub Proposed Roadway and Sidewalk area	10,560	sf	\$0.15	\$1,584.00
2	Excavate to Subgrade and General Site Grading	1	ls	\$935.00	\$935.00
3	Furnish and Install Mirafi RS 2080i Geotextile	669	sy	\$2.00	\$1,338.00
4	Furnish and Install Imported Granular Material (12" min)	590	ton	\$11.00	\$6,490.00
5	Furnish and Install Road Base (8" min)	437	ton	\$16.50	\$7,210.50
6	Furnish and Install Asphalt Pavement (3" min)	140	ton	\$77.00	\$10,780.00
7	Furnish and Install 30" Curb and Gutter	317	lf	\$17.50	\$5,547.50
8	Furnish and Install Concrete Flatwork	1,268	sf	\$6.00	\$7,608.00
9	Furnish and Install Landscape Rock over Weed Barrier	1,426	sf	\$2.00	\$2,852.00
<b>UTILITIES</b>					
10	Furnish and Install 8" PVC C900 Waterline	165	lf	\$33.00	\$5,445.00
11	Furnish and Install Fire Hydrant Assembly	0.75	ea	\$5,500.00	\$4,125.00
12	Connect to Existing Water	0.25	ea	\$1,500.00	\$375.00
13	Furnish and Install 8" PVC Sewer Line	95	lf	\$40.00	\$3,800.00



14	Furnish and Install 4' Diameter Sewer Manhole	1.50 ea	\$3,000.00	\$4,500.00
15	Connect to Existing Sewer	0.25 ea	\$2,500.00	\$625.00
16	Furnish and Install 15" RCP Storm Drain Line	171 lf	\$37.00	\$6,327.00
17	Furnish and Install 4' Diameter Storm Manholes	1.25 ea	\$3,000.00	\$3,750.00
18	Furnish and Install Type II Catch Basin	2.00 ea	\$2,200.00	\$4,400.00
19	Connect to Existing Storm Drain	0.25 ea	\$2,500.00	\$625.00
20	Furnish and Install 6" Secondary Water Line	80 lf	\$35.00	\$2,800.00
<b>SUBTOTAL =</b>				<b>\$81,117.00</b>
<b>10%± Contingency &amp; Engineering =</b>				<b>\$8,111.70</b>
<b>TOTAL =</b>				<b>\$89,228.70</b>
<b>% OF OVERALL PROJECT=</b>				<b>10.39%</b>

<b>ASHFIELD APARTMENTS</b>					
<b>Item</b>	<b>Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Total</b>
<b>MINOR ARTERIAL ROADWAY (66' ROW)</b>					
1	Clear and Grub Proposed Roadway and Sidewalk area	13,530	sf	\$0.15	\$2,029.50
2	Excavate to Subgrade and General Site Grading	1	ls	\$1,210.00	\$1,210.00
3	Furnish and Install Mirafi RS 2080i Geotextile	866	sy	\$2.00	\$1,732.00
4	Furnish and Install Imported Granular Material (12" min)	764	ton	\$11.00	\$8,404.00
5	Furnish and Install Road Base (8" min)	565	ton	\$16.50	\$9,322.50
6	Furnish and Install Asphalt Pavement (3" min)	180	ton	\$77.00	\$13,860.00
7	Furnish and Install 30" Curb and Gutter	410	lf	\$17.50	\$7,175.00
8	Furnish and Install Concrete Flatwork	1,640	sf	\$6.00	\$9,840.00
9	Furnish and Install Landscape Rock over Weed Barrier	1,845	sf	\$2.00	\$3,690.00
<b>UTILITIES</b>					
10	Furnish and Install 8" PVC C900 Waterline	205	lf	\$33.00	\$6,765.00
11	Furnish and Install Fire Hydrant Assembly	0.75	ea	\$5,500.00	\$4,125.00
12	Connect to Existing Water	0.25	ea	\$1,500.00	\$375.00
13	Furnish and Install 8" PVC Sewer Line	205	lf	\$40.00	\$8,200.00
14	Furnish and Install 4' Diameter Sewer Manhole	1.50	ea	\$3,000.00	\$4,500.00
15	Connect to Existing Sewer	0.25	ea	\$2,500.00	\$625.00
16	Furnish and Install 15" RCP Storm Drain Line	205	lf	\$37.00	\$7,585.00
17	Furnish and Install 4' Diameter Storm Manholes	1.25	ea	\$3,000.00	\$3,750.00
18	Furnish and Install Type II Catch Basin	2.00	ea	\$2,200.00	\$4,400.00
19	Connect to Existing Storm Drain	0.25	ea	\$2,500.00	\$625.00
20	Furnish and Install 6" Secondary Water Line	205	lf	\$35.00	\$7,175.00
<b>SUBTOTAL =</b>				<b>\$105,388.00</b>	
<b>10%± Contingency &amp; Engineering =</b>				<b>\$10,538.80</b>	
<b>TOTAL =</b>				<b>\$115,926.80</b>	
<b>PERCENT OF OVERALL PROJECT=</b>				<b>13.50%</b>	

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	3.5
Untreated Base Course Thickness (in) =	10
Granular Borrow Thickness (in) =	14
Roadway Excavation Depth (ft) =	2.5
Number of Sidewalks (No.) =	2

Project Parameters:

Project Number: 4
Improvement Type: New Road
Completion Year: 2030
Roadway Functional Class: Minor Arterial - 80'





## Tremonton City Transportation Master Plan

### BR Mountain Road 2300 West to Main Street

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$10	0	\$0
Removal of Existing Asphalt	S.Y.	\$4	6,013	\$24,053
Clearing and Grubbing	Acre	\$2,000	2	\$4,848
Roadway Excavation	C.Y.	\$11	1,833	\$19,250
HMA Concrete	Ton	\$85	639	\$54,347
Untreated Base Course	C.Y.	\$15	489	\$7,333
Granular Borrow	C.Y.	\$40	367	\$14,667
Curb and Gutter (2.5' width)	L.F.	\$23	2,640	\$59,400
Sidewalk (5' width)	L.F.	\$30	2,640	\$79,200
Drainage	L.F.	\$45	2,640	\$118,800
Right of Way	S.F.	\$1.27	105,600	\$134,537
Mirafi RS 280i fabric	S.F.	\$0.6	19,800	\$11,880
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$193,000	1	\$193,000
<b>Construction Cost</b>				<b>\$721,316</b>
Mobilization (10% of Construction)	Lump	10%	72,132	\$72,132
Contingency (25% of Construction)	Lump	25%	180,329	\$180,329
<b>Subtotal</b>				<b>\$973,777</b>

Preconstruction Engineering	10%	\$72,132
Construction Engineering	10%	\$72,132

**Total Project Costs**      **\$1,119,000**

**Tremonton City's Responsibility**      **22%**

**Tremonton Total Project Costs**      **\$246,180**

Overall Assumptions:

HMA Pavement Density (pcf) =	155
HMA Thickness (in) =	5
Untreated Base Course Thickness (in) =	8
Granular Borrow Thickness (in) =	6
Roadway Excavation Depth (ft) =	2.5
Number of Sidewalks (No.) =	2

Project Parameters:

Project Number: 5
Improvement Type: <b>New Road</b>
Completion Year: <b>2030</b>
Roadway Functional Class: <b>Minor Arterial - 80'</b>



**Tremonton City  
Transportation Master Plan**

**2000 West Realignment to Project #4**

**Costs**

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$10	0	\$0
Removal of Existing Asphalt	S.Y.	\$4	0	\$0
Clearing and Grubbing	Acre	\$2,000	1	\$1,818
Roadway Excavation	C.Y.	\$11	2,333	\$24,500
HMA Concrete	Ton	\$85	651	\$55,335
Untreated Base Course	C.Y.	\$15	622	\$9,333
Granular Borrow	C.Y.	\$40	467	\$18,667
Curb and Gutter (2.5' width)	L.F.	\$23	1,200	\$27,000
Sidewalk (5' width)	L.F.	\$25	1,200	\$30,000
Drainage	L.F.	\$45	1,200	\$54,000
Right of Way	S.F.	\$1.27	600	\$764
Mirafi RS 280i fabric	S.F.	\$1	0	\$0
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$193,000	0	\$0
<b>Construction Cost</b>				<b>\$221,418</b>
Mobilization (10% of Construction)	Lump	10%	22,142	\$22,142
Contingency (25% of Construction)	Lump	25%	55,354	\$55,354
<b>Subtotal</b>				<b>\$298,914</b>

<b>Preconstruction Engineering</b>	10%	\$22,142
<b>Construction Engineering</b>	10%	\$22,142

<b>Total Project Costs</b>	<b>\$344,000</b>
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Overall Assumptions:

HMA Pavement Density (pcf) =	<b>155</b>
HMA Thickness (in) =	<b>4</b>
Untreated Base Course Thickness (in) =	<b>8</b>
Granular Borrow Thickness (in) =	<b>6</b>
Roadway Excavation Depth (ft) =	<b>2.5</b>
Number of Sidewalks (No.) =	<b>2</b>

Project Parameters:

Project Number: <b>10</b>
Improvement Type: <b>New Road</b>
Completion Year: <b>2030</b>
Roadway Functional Class: <b>Collector</b>

Description	Qty	Unit	Unit Price	Total
ear and Grub Proposed Roadway and Sidewalk area	95,964	sf	\$0.15	\$14,394.60
remove existing curb & gutter	90	lf	\$20.00	\$1,800.00
remove existing concrete flatwork	5,533	sf	\$3.50	\$19,365.50
remove & replace ROW fence, as req'd	540	lf	\$10.00	\$5,400.00
remove & replace chain link fence, as req'd	200	lf	\$25.00	\$5,000.00
relocate existing street sign	4	ea	\$350.00	\$1,400.00
relocate existing mailbox	2	ea	\$350.00	\$700.00
relocate water valve out of curb and gutter	1	ea	\$1,500.00	\$1,500.00
relocate water meter out of curb and gutter	1	ea	\$1,500.00	\$1,500.00
relocate catch basin to new curb & gutter	3	ea	\$2,500.00	\$7,500.00
relocate existing sewer manhole	1	ea	\$3,500.00	\$3,500.00
remove existing 3" asphalt	38,530	sf	\$0.50	\$19,265.00
excavate to Subgrade and General Site Grading (cut approx. 400 cy)	1	ls	\$11,000.00	\$11,000.00
remove and dispose of existing culvert	184	lf	\$50.00	\$9,200.00
replace existing culvert	184	lf	\$150.00	\$27,600.00
import and install structural backfill	800	cy	\$15.00	\$12,000.00
import and Install Mirafi RS 2080i Geotextile	6,890	sy	\$2.00	\$13,780.00
import and Install Road Base (8" min)	3,013	ton	\$16.50	\$49,714.50
import and Install Asphalt Pavement (3" min)	1,202	ton	\$77.00	\$92,554.00
import and Install 30" Curb and Gutter	2,865	lf	\$17.50	\$50,137.50
import and Install Concrete Flatwork	10,815	sf	\$6.00	\$64,890.00
new ADA pedestrian ramps	5	ea	\$2,500.00	\$12,500.00
repair driveways (asphalt)	1,500	sf	\$7.00	\$10,500.00
repair driveways (gravel)	900	sf	\$5.00	\$4,500.00
import and Install retaining wall (max 8')	240	lf	\$250.00	\$60,000.00
<b>OVERALL PROJECT SUBTOTAL =</b>				<b>\$499,701.10</b>
<b>30%± Contingency &amp; Engineering =</b>				<b>\$149,910.33</b>
<b>TOTAL PROJECT=</b>				<b>\$649,611.43</b>

<u>Overall Assumptions</u>		<u>Project Parameters</u>	
HMA Pavement Density (pcf)=	<b>155</b>	Project Number:	<b>23a</b>
HMA Thickness (in)=	<b>3</b>	Improvement	<b>Capacity Improvement</b>
Untreated Base Course Thickness (in)=	<b>8</b>	Completion Year:	<b>2030</b>
Granular Borrow Thickness (in)=	<b>6</b>	Roadway Functional Class:	<b>Minor Arterial - 66'</b>
Roadway Excavation Depth (ft)=	<b>2.5</b>		
Number of Sidewalks (No)=	<b>2</b>		



**Tremonton City  
Transportation Master Plan**

**1000 North: 3100 West/Country View Drive to 2560 West**

**Costs**

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$10	0	\$0
Removal of Existing Asphalt	S.Y.	\$4	9,559	\$38,236
Clearing and Grubbing	Acre	\$2,000	0	\$0
Roadway Excavation	C.Y.	\$11	5,642	\$59,246
HMA Concrete	Ton	\$85	1,574	\$133,811
Untreated Base Course	C.Y.	\$15	1,881	\$28,212
Granular Borrow	C.Y.	\$40	2,633	\$105,326
Curb and Gutter (2.5' width)	L.F.	\$23	7,169	\$161,308
Sidewalk (5' width)	L.F.	\$25	7,169	\$179,231
Drainage	L.F.	\$45	7,169	\$322,616
Right of Way	S.F.	\$1.27	3,585	\$4,567
Mirafi RS 280i fabric	S.F.	\$1	0	\$0
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$193,000	0	\$0
<b>Construction Cost</b>				<b>\$1,032,553</b>
Mobilization (10% of Construction)	Lump	10%	103,255	\$103,255
Contingency (25% of Construction)	Lump	25%	258,138	\$258,138
<b>Subtotal</b>				<b>\$1,393,946</b>

<b>Preconstruction Engineering</b>	10%	\$103,255
<b>Construction Engineering</b>	10%	\$103,255

<b>Total Project Costs</b>	<b>\$1,600,500</b>
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Overall Assumptions:

HMA Pavement Density (pcf) =	<b>155</b>
HMA Thickness (in) =	<b>4</b>
Untreated Base Course Thickness (in) =	<b>10</b>
Granular Borrow Thickness (in) =	<b>14</b>
Roadway Excavation Depth (ft) =	<b>2.5</b>
Number of Sidewalks (No.) =	<b>2</b>

Project Parameters:

Project Number: <b>23b</b>
Improvement Type: <b>Capacity Improvement</b>
Completion Year: <b>2030</b>
Roadway Functional Class: <b>Minor Arterial - 66'</b>

**Tremontion City  
Transportation Master Plan**

1000 North: 1500 West to Iowa String Road

**Costs**

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$10	0	\$0
Removal of Existing Asphalt	S.Y.	\$4	9,111	\$36,444
Clearing and Grubbing	Acre	\$2,000	0	\$565
Roadway Excavation	C.Y.	\$11	190	\$1,993
HMA Concrete	Ton	\$85	53	\$4,501
Untreated Base Course	C.Y.	\$15	63	\$949
Granular Borrow	C.Y.	\$40	89	\$3,543
Curb and Gutter (2.5' width)	L.F.	\$23	4,100	\$92,250
Sidewalk (5' width)	L.F.	\$25	4,100	\$102,500
Drainage	L.F.	\$45	4,100	\$184,500
Right of Way	S.F.	\$1.27	2,050	\$2,612
Mirafi RS 280i fabric	S.F.	\$1	0	\$0
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$193,000	0	\$0
<b>Construction Cost</b>				<b>\$429,858</b>
Mobilization (10% of Construction)	Lump	10%	42,986	\$42,986
Contingency (25% of Construction)	Lump	25%	107,464	\$107,464
<b>Subtotal</b>				<b>\$580,308</b>

<b>Preconstruction Engineering</b>	10%	\$42,986
<b>Construction Engineering</b>	10%	\$42,986

<b>Total Project Costs</b>	<b>\$667,000</b>
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Overall Assumptions:

HMA Pavement Density (pcf) =	<b>155</b>
HMA Thickness (in) =	<b>4</b>
Untreated Base Course Thickness (in) =	<b>10</b>
Granular Borrow Thickness (in) =	<b>14</b>
Roadway Excavation Depth (ft) =	<b>2.5</b>
Number of Sidewalks (No.) =	<b>2</b>

Project Parameters:

Project Number: <b>26</b>
Improvement Type: <b>Capacity Improvement</b>
Completion Year: <b>2030</b>
Roadway Functional Class: <b>Minor Arterial - 66'</b>



## Tremonton City Transportation Master Plan

### Main Street Widening: Install Turn Lane at 1650 West

#### Costs

Item	Unit	Unit Cost	Quantity	Cost
Parkstrip	S.F.	\$10	0	\$0
Removal of Existing Asphalt	S.Y.	\$4	987	\$3,946
Clearing and Grubbing	Acre	\$2,000	0	\$177
Roadway Excavation	C.Y.	\$11	679	\$7,131
HMA Concrete	Ton	\$85	237	\$20,133
Untreated Base Course	C.Y.	\$15	136	\$2,037
Granular Borrow	C.Y.	\$40	340	\$13,583
Curb and Gutter (2.5' width)	L.F.	\$23	386	\$8,686
Sidewalk (5' width)	L.F.	\$25	386	\$9,651
Drainage	L.F.	\$45	386	\$17,372
Right of Way	S.F.	\$1.27	193	\$246
Mirafi RS 280i fabric	S.F.	\$1	0	\$0
Bridge/Culvert	S.F.	\$225	0	\$0
Traffic Signal	Each	\$193,000	0	\$0
<b>Construction Cost</b>				<b>\$82,964</b>
Mobilization (10% of Construction)	Lump	10%	8,296	\$8,296
Contingency (25% of Construction)	Lump	25%	20,741	\$20,741
<b>Subtotal</b>				<b>\$112,002</b>

<b>Preconstruction Engineering</b>	10%	\$8,296
<b>Construction Engineering</b>	10%	\$8,296

<b>Total Project Costs</b>	<b>\$129,000</b>
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#### Overall Assumptions:

HMA Pavement Density (pcf) =	<b>155</b>
HMA Thickness (in) =	<b>5</b>
Untreated Base Course Thickness (in) =	<b>6</b>
Granular Borrow Thickness (in) =	<b>15</b>
Roadway Excavation Depth (ft) =	<b>2.5</b>
Number of Sidewalks (No.) =	<b>2</b>

#### Project Parameters:

Project Number: <b>67</b>
Improvement Type: <b>Capacity Improvement</b>
Completion Year: <b>2030</b>
Roadway Functional Class: <b>Major Arterial</b>



Setting Asphalt	S.Y.	\$4	4,444	3,920	\$17,778	\$15,611
Subgrading	Acre	\$2,000	1	1	\$1,837	\$1,622
Subbase	C.Y.	\$11	1,481	1,307	\$15,556	\$13,771
Subbase	Ton	\$85	517	456	\$43,917	\$38,760
Base Course	C.Y.	\$15	395	348	\$5,926	\$5,220
Subbase	C.Y.	\$40	296	261	\$11,852	\$10,440
Subbase (2.5' width)	L.F.	\$23	2,000	1,764	\$45,000	\$39,660
Subbase (2.5' width)	L.F.	\$30	2,000	1,764	\$60,000	\$52,920
Subbase	L.F.	\$45	2,000	1,764	\$90,000	\$79,320
Subbase	S.F.	\$1.27	1,000	882	\$1,274	\$1,112
Subbase	S.F.	\$1	0	0	\$0	\$0
Subbase	S.F.	\$225	0	2,880	\$0	\$648,000
Subbase	Each	\$193,000	0	0	\$0	\$0

<b>Construction Cost</b>					<b>\$293,138</b>	<b>\$906,500</b>
10% of Construction	Lump	10%	29,314	90,655	\$29,314	\$90,655
25% of Construction	Lump	25%	73,285	226,637	\$73,285	\$226,637
<b>Subtotal</b>					<b>\$395,737</b>	<b>\$1,223,192</b>

<b>Preconstruction Engineering</b>	10%		\$29,314	\$90,655
<b>Construction Engineering</b>	10%		\$29,314	\$90,655

<b>Total Project Costs</b>					<b>\$455,000</b>	<b>\$1,406,839</b>
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<b>Tremonton City's Responsibility</b>					<b>22%</b>	<b>100</b>
					<b>\$100,100</b>	<b>\$1,406,839</b>

<b>Total Project Cost</b>					<b>\$1,507,000</b>	
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Overall Assumptions:

IMA Pavement Density (pcf) = **155**

HMA Thickness (in) = **5**

Subbase Base Course Thickness (in) = **8**

Annual Borrow Thickness (in) = **6**

Roadway Excavation Depth (ft) = **2.5**

Number of Sidewalks (No.) = **2**

Project Parameters:

Project Number: **74**

Improvement Type: **Capacity Improvement**

Completion Year: **2030**

Roadway Functional Class: **Minor Arterial - 80'**

9/30/2021

Publication or Posting Date:

STATE OF UTAH )

: ss.

County of Box Elder )

I, Linsey Nessen, the City Recorder of Tremonton, Utah, do hereby certify that the above and foregoing is a full and correct copy of Ordinance No. 21-09, entitled “**ADOPTING AN IMPACT FEE FACILITIES PLANS FOR A WATER SYSTEM; SANITARY SEWER COLLECTION SYSTEM; STORM DRAIN SYSTEM; AND TRANSPORTATION**” adopted and passed by the City Council of Tremonton, Utah, at a regular meeting thereof on September 21, 2021, which appears of record in my office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the City this 21<sup>st</sup> day of September 2021.



  
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Linsey Nessen, City Recorder